WORKSHOP REPORT ON

Sharing the "Turn Around Program" of Dhaka WASA and Networking for Inclusive Water Supply in Large Cities

Pan Pacific Sonargaon Hotel, Dhaka
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Organized by:
Local Government Division
Ministry of Local Government, Rural Development & Cooperatives
&
Water And Sanitation Program (WSP-SA)
The World Bank, Dhaka

Workshop on
Sharing the Turn Around Program of Dhaka WASA and Networking for Inclusive Water Supply in Large Cities

PROCEEDINGS

ACRONYMS

ADB	Asian Development Bank
BCC	Barisal City Corporation
BDT	Bangladesh Taka
BM	Benchmarking
BMDF	Bangladesh Municipal Development Fund
BUET	Bangladesh University of Engineering and Technology
BWSSP	Bangladesh Water Supply and Sanitation Project
CWASA	Chittagong Water Supply and Sewerage Authority
DMD	Deputy Managing Director
DWASA	Dhaka Water Supply and Sewerage Authority
DPHE	Department of Public Health Engineering
FM	Financial Management
DWSS	Drinking Water Supply and Sanitation
GoB	Government of Bangladesh
IB-Net	International Benchmarking- Network
ITN	International Training Network
LGED	Local Government Engineering Department
LGD	Local Government Division
LIC	Low Income Communities
MDG	Millennium Development Goal
MoLGRD&C	Ministry of Local Government, Rural Development & Cooperatives
NGO	Non Governmental Organization
O&M	Operation and Maintenance
P&D	Planning and Development
PIP	Performance Improvement Plan
RCC	Rajshahi City Corporation
RWASA	Rajshahi Water Supply and Sewerage Authority (RWASA)
SCC	Sylhet City Corporation
UNICEF	United Nation Children's Fund
WASA	Water Supply and Sewerage Authority
WB	World Bank
WBOD	World Bank Office Dhaka
WHO	World Health Organization
WSP- SA	Water and Sanitation Program- South Asia
WSS	Water Supply and Sanitation

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1. 0. EXECUTIVE SUMMARY

The Government of Bangladesh is supporting several development projects for water supply in Dhaka, Chittagong, Khulna, Rajshahi, Sylhet and Barisal City Corporation. For better service delivery Water Supply and Sewerage Authorities (WASA) have been established as a service oriented autonomous commercial organization in the Public sector in Dhaka, Chittagong, Khulna and Rajshahi city corporations. Dhaka WASA has already gained long experiences and made a number of notable achievements including significant increase in water production and productivity, improved service quality, increased revenue, reduction of non-revenue water, and provision of water supply at low cost. Others are still to build their own capacity to meet the challenges in city water supply.

The population growth rate in urban areas is over 2.85[1] percent, on average, whereas the growth rate in metropolitan cities is estimated to be about 5 percent. With increase in population the demand for water supply and sanitation is also increasing at a high rate. Water supply is mostly dependent on underground source. At present 87% of the supplied water is from ground water abstraction from Dhaka WASA's 605 deep tube wells. The remaining 13% water comes from surface water treatments. The underground source is being threatened by gradual lowering down of water table and contamination of arsenic, salinity, iron and other chemicals. The surface water is also threatened due to non availability and high rate of impurities. The water supply, particularly the supply of safe drinking water is becoming a great challenge due to critical problems with the sources, high demand, increasingly dense settlements of poor people in the large cities. To continue the services by overcoming these challenges, efficient water utilities with highly capable and professional manpower are needed.

Benchmarking is considered as a powerful tool and management technique that enables any organization to see and compare its performance as well as the process in order to identify good practices, results and weaknesses for further improvement. The IB-Net Benchmarking initiative was first introduced in 11 utilities; those participating were Water and Sewerage Authorities (WASAs) serving Dhaka and Chittagong, Rajshahi City Corporation and eight Pourashavas. WSP-SA worked closely with the Local Government Division of the MoLGRD&C to introduce key IB-NET performance indicators and data collection methodologies to utility managers of these towns and encouraged other towns to join. The number of water utilities under Benchmarking initiative is now 33.

Following successful introduction of benchmarking and performance improvement planning (PIP), the smaller water utilities also formed an informal network for facilitating performance improvement through peer learning and sharing experiences among themselves. The network has already identified several good practices and many of them are being replicated to improve their own service delivery in respective towns. Dhaka WASA has considerably improved their performance and received the "Water Performer of the Year Award 2011" at the Global Water Summit held in Germany in April 2011 through practicing Benchmarking. Some of the recognized good practices are reduction of non revenue water from 41% to 33%, increasing the revenue income by 20% and reduction of operational costs. Dhaka WASA is now implementing "Turn Around" i.e. "Ghure Darao" program to attain self reliance and ensure service to all the citizens of Dhaka city.

Chittagong WASA is implementing large projects with support from World Bank and

[1] World Bank Report 2011

likely to get further assistance from JICA. The Khulna WASA is developing projects and expecting to get support from JICA and ADB for installing surface water treatment plant and extending its water supply services. Rajshahi WASA is trying to get some support from Government for implementing some urgent works. Barisal and Sylhet City corporations are implementing a project of Tk. 102 crore each for improving water supply with surface water treatment plant. Despite having large projects the WASAs and City Corporation authorities are not capable enough to implement large projects because of shortage of manpower, lack of required technical expertise and skills, project management skills and institutional weaknesses. Therefore, capacity building of the WASAs and City Corporations is considered as an immediate concern of the decision makers.

Dhaka WASA has gained many years of experiences in implementing large projects, managing critical issues, decision making and establishing comparatively better customer relation and maintaining liaison with policymakers and support agencies. Peer to peers learning and identifying good practices and replication of the same can encourage the WASAs to learn and improve their capacity. One of the immediate initiatives is building networking among the WASAs and City Corporations' authorities, which may help for overcoming the problem to a great extent.

In the above context, the Local Government Division of MoLGRD&C with support of WSP-SA organized this sharing and networking workshop at Pan Pacific Sonargaon Hotel, Dhaka on April 16, 2012 to build relationship between Dhaka WASA and other large utilities so that they can learn and share the good practices and provide cross support for capacity building for improving the service delivery at the respective utility level. The inaugural session of the workshop was addressed among others by Advocate Jahangir Kabir Nanak, MP and the Honourable State Minister of MoLGRD&C as Chief Guest, Mr, Abu Alam Shahid Khan, Secretary Local Government Division and Ms. Zuena Aziz, Additional Secretary of LGD. A total of 62 representatives from WASAs, city corporations, large Pourashava, government organizations, non-government organizations (NGOs), consultants, funding agencies and development partners attended the workshop.

A number of presentations were made in the workshop on overview of Benchmarking and Performance Improvement Planning (PIP), "Turn Around" Program of Dhaka WASA and "status, prospects and challenges of Rajshahi, Chittagong and Khulna WASA, Sylhet City Corporation and Rangpur Pourashava. Elaborate discussions were also held on the presentations. A group work was done in the workshop to find the challenges in the area of "project management, operation and maintenance, human resources management, financial management, customers relation etc" in managing water supply in large cities of Bangladesh and possible areas of cooperation among the large water utilities in Bangladesh were identified..

Based on discussions, presentations and group exercise, the workshop came up with the following recommendations:

- The success and good experience of Dhaka WASA may be shared and adopted by other utilities through formation of network among the large utilities;
- The respective WASA should practice Benchmarking and PIP by collecting realistic data, analysis of the same and take appropriate actions and performance improvement plan.

- Dhaka WASA may extend their technical assistance to other large water utilities especially in project management, O&M, social responsibility, accountability, etc. It may be considered to provide professional support from Dhaka WASA to others.
- The water utilities should organize third party consumer level survey to know the views of the consumers about performance and service level of the utilities.
- Dialogue and awareness events are needed to share the critical issues of water supply based on Benchmarking data and consumer level survey and bring the consumers on board as integral part of the water supply system.
- To protect the ground water reserve, the large water utilities should explore sustainable surface water sources for treatment and supply. In this regard, an assessment should be conducted in few towns to test the technical and economical viability of surface water treatment and supply.
- Dhaka WASA should extend the support for training of staff from other utilities. The other utilities should have the opportunity to send participants to Dhaka WASA's own training program.
- The laboratory facility of Dhaka WASA and local DPHE should also be accessed by the other utilities having no such facilities.
- WSP-SA may support for organizing several workshops for developing the framework for Water Utilities Network and experience sharing events for large water utilities.
- LGD may take the role for coordinating and facilitating such network for strengthening the water utilities.

2. 0. INTRODUCTION

With around 150 million people in an area of 147,570 km^2, Bangladesh is at the top in the world in terms of density of population. The population growth rate in urban areas is over 2.85 percent, on average, whereas the growth rate in metropolitan cities is about 5 percent. Dhaka is the capital and the largest metropolitan city of the country, with more than 12 million people. The next largest cities are Chittagong, Khulna, Rajshahi, Barisal, Sylhet and Comilla City Corporations with population ranging from 0.1 million to 5 million. With increase in population the demand for water supply and sanitation is also increasing at a high rate. The population of Dhaka, for example, is expected to rise to 21 million by 2025. The other large towns will follow the same pattern in the future.

The city corporations and pourashavas are legally responsible for water supply and sanitation services to the people, including poor people, within the municipality area. Water Supply and Sewerage Authorities (WASA) are established in Dhaka and Chittagong in 1962 and in Khulna and Rajshahi recently. Out of 309 pourashavas only 102 towns are having intermittent and very limited scale piped water supply serving only about 30% of their population. The poorer people are the most vulnerable to inadequate water supply and sanitation services. Large numbers of future urban populations will thus require a reliable and safe piped water supply system.

Only Dhaka WASA has been entrusted with sanitation services (sewerage and drainage) having only 20% coverage under sewerage system. Other WASAs in Chittagong, Khulna and Rajshahi are still responsible for water supply only. The sanitation services in all the city corporations except Dhaka city and in all the poursahavas are done by the conservancy section of the respective city corporation and pourashava.

Almost 90% of the water supply system is dependent on underground source. Only 10% of water supply use surface water. The sector faces enormous challenges due to critical problems with both the sources as well rapid urbanization and increasingly dense settlements especially in the poor settlements and also the potential impact of climate change. The underground water source is threatened by contamination of arsenic, salinity, iron and continuous lowering down of ground water table. The surface water is constrained by declining flows in the rivers, drying up of low and wet lands, filling up of ponds, canals, and low lying areas, high rate of bacteriological and chemical contamination in the available surface water, etc. The frequent power cuts and extreme resource constraints add more difficulties in maintaining and extending the water supply and sanitation services. Thus the water supply and sanitation services in the urban towns are becoming a big challenge for the policy makers, service providers and consumers.

Some of the critical issues observed for inclusive urban water supply are:

- Rapid urbanization and increasingly dense settlements especially of poor people;
- Arsenic contamination in a quarter of the country's underground water at shallow depth;
- Increasing salinity in the costal belts;
- Falling of underground water table steadily putting many wells in operative;
- Other contaminations such as iron, calcium in the ground water;
- Scarcity of good surface water and high cost for treatment;
- Resource constraint for huge investment required for the system;
- Dilemma of water as economic good over social good; and
- Capacity of the water utilities to meet the challenges

However, with all these problems the utilities and the consumers are somehow managing safe drinking water to survive with great uncertainty in the future. To continue the services by overcoming these challenges, highly capable and professional water utilities are needed.

The benchmarking is considered as a powerful tool and management technique that enables any organization to see and compare performance as well as the process in order to identify good practices and results and also the weaknesses for improving the performance. The IB-Net Benchmarking initiative was first introduced in 11 utilities; those participating were Water and Sewerage Authorities (WASAs) serving Dhaka and Chittagong, Rajshahi City Corporation and eight pourashavas. WSP-SA worked closely with the Local Government Division of the MoLGRD&C to introduce key IBNET performance indicators and data collection methodologies to utility managers of these towns. The focus then shifted to providing hands-on support to work teams within each utility, to assist them in collecting and assessing the data and developing own performance improvement plan for improved service delivery. The number of water utilities under Benchmarking initiative is now 33 including WASAs and Barisal and Sylhet City Corporation.

Following successful introduction of benchmarking and performance improvement planning (PIP), the smaller water utilities also formed an informal network for performance improvement. The network is functioning effectively with coordination of the pourashavas nominated by the members on six monthly rotation bases. The network has already identified several good practices and many of them are being replicated to improve their own service delivery. The total number of members is 30 and they have arranged 8 exchange visits and network workshops with support from WSP-SA. The urban water utilities network remained limited to the small water utilities of the pourashavas because of homogeneity in size, institutional setup and modalities of operation. The WASAs and the city corporations remained out of the network because of large size and institutional set up.

From the Benchmarking data analysis it has been revealed that Dhaka WASA has considerably improved their performance and received the “Water Performer of the Year Award 2011” at the Global Water Summit held in Germany in April 2011. Some of the good practices recognized are reduction of non revenue water to 33% from 41%, increasing the revenue income by 20% and reduction of operational costs. Dhaka WASA is implementing “Turn Around” i.e. “Ghure Darao” program to attain self reliance and ensure service to all the citizens of Dhaka City.

Chittagong WASA is implementing large projects with support from World Bank and likely to get further assistance from JICA. The Khulna WASA is developing projects and expecting to get support from JICA and ADB for installing surface water treatment plant and extending its water supply services. Rajshahi WASA is trying to get some support from Government for implementing some urgent works. Barisal and Sylhet City corporations are implementing a project of Tk. 102 crore each for improving water supply with surface water treatment plant. But despite large projects the WASAs and City corporation authorities are not capable enough to implement large projects because of shortage of manpower, lack of required technical expertise and skills, project management skills and institutional weaknesses. Therefore, capacity building of the WASAs and City Corporations within a

short time is considered as an immediate concern of the decision makers.

In terms of capacity building for service level improvement, Khulna WASA needs support for developing a frame work outlining the basic principles for establishing the linkages between the Khulna City Corporation and Khulna WASA, communication support for elected and administrative representatives from City Corporation, citizens, service providers and other partners for improved service delivery. They also badly need technical assistance from Dhaka WASA for design, develop and implement large projects for water supply with treatment plant, transmission and distribution network.

Rajshahi WASA has started functioning very recently with few staff. The construction of the large surface water reatment has been completed and now under trail operation. It has not yet been handed over to WASA from DPHE and not connected to the network. WASA has not yet been manned with appropriate manpower and they do not have a transitional plan. However the books of accounts are separated from the city corporation. They also need support for capacity building and management development, system development and operational skills development.

WASAs in Chittagong, Khulna and Rajshahi are yet to be organized and build capacity to provide desired services to the citizen. The comparative status of some performance indicators of WASAs and the developing countries standard is shown below:

Performance Indicators	DWASA	CWASA	KWASA	RWASA	Developing Country Standard
Coverage (% of population served)	89.31	40	24	67	100
Water consumption (lpcd)	120	97	90	65	145
Operating ratio (O&M-expenses / revenue)	0.78	1.1	3.0	1.3	0.7
Collection efficiency in % (revenue/billing)	94.9	100	73.4	54	100
Staff/1000 connection	9.11	14.21	21.5	8.4	5

The table shows that each of the WASAs has some good performance and some weak performance. It has been observed that Chittagong WASA, Khulna WASA and Rajshahi WASA are organizationally weak and lack appropriate manpower and management capacity. They find it difficult to implement the Benchmarking and Performance Improvement Planning (PIP) initiative properly and improve their

performance because of lack of manpower and skill, guidance from the higher

authorities and poor support from City Corporation as well as the consumers.

Peer to peers learning and identifying good practices and replication of the same can encourage the smaller WASAs to learn and improve their capacity. One of the immediate initiatives is building networking among the WASAs and City Corporations' authorities, which may help for overcoming the problem to a great extent. Dhaka WASA has gained many years of experiences in implementing large projects, managing critical issues, decision making and establishing comparatively better customer relation and maintaining liaison with policymakers and support agencies. They have successfully introduced water meters, computerized billing, developing advocacy and communication materials, legal actions, addressing low income communities, etc.

WSP-SA may support for exchange visits and networking among the WASAs in Dhaka, Chittagong, Khulna and Rajshahi and other city corporations to build the capacities of large water utilities.

The workshop was planned and organized by the Local Government Division of MoLGRD&C with support of WSP-SA and held at Pan Pacific Sonargaon Hotel, Dhaka on April 16, 2012 to build relationship between Dhaka WASA and other large utilities so that they can learn and share the good practices and provide cross support and for improving the service delivery at the respective utility level. A total of 62 representatives (List of participants shown in Annex-2) from WASAs, city corporations, large pourashava, government organizations, non-government organizations (NGOs), consultants, funding agencies and development partners attended the workshop. The workshop created an opportunity to share each of large utility's opportunities, challenges and good practices. The workshop discussed and identified the possible areas of cooperation among the large utilities to improve their performance and planning for the future networking among them and mutual support.

Workshop Topics:

- Introduction, welcome address and inaugural speeches;
- Presentation of "Turn Around Program of Dhaka WASA";
- Presentation on Benchmarking and PIP;
- Presentations on status of water supply in large water utilities;
- Group exercise in identifying the possible areas of cooperation among large utilities; and
- Discussion for planning for the future

Workshop Sessions:

Part I	:	Inaugural session;
Part II	:	Presentations and discussions session;
Part III	:	Group exercise;
Part IV	:	Recommendations and closing.

Workshop Tools:

The workshop tools included a combination of power point presentations, discussions and group exercises.

3. INAUGURAL SESSION

The inaugural session of the workshop was addressed by Ms. Zuena Aziz, Additional Secretary of LGD, who welcomed all the participants of the workshop. The key note paper was presented by Mr. Taqsem A. Khan, Managing Director of Dhaka WASA. Mr. Abu Alam Md. Shahhid Khan, Secretary Local Government Division was present in the meeting as Special Guest, and Advocate Jahangir Kabir Nanak, MP the Honorable State Minister of MoLGRD&C spoke in the meeting as Chief Guest. The meeting was chaired by Mr. Golam Mostafa, Chaiman Dhaka WASA Board.

3.1 Welcome Speech

Ms. Zuena Aziz,
Additional Secretary, LGD

At the outset Ms. Zuena Aziz, Additional Secretary of the Local Government Division welcomed all the participants in the workshop and briefed them about the objectives of the workshop. She highlighted lot of critical issues such as rapid urbanization and increasingly dense settlements especially of poor people, falling of water table, scarcity of good quality surface water and capacity of the water utilities to meet the challenges etc in delivering water supply services by the utilities. She pointed out that in addition of high investment particularly for surface water treatments and allied works, highly capable and professional water utilities are needed. The benchmarking is a powerful tool and management technique that can enable the water supply utilities to see, analyze and improve performance by implementing PIP.

She mentioned in her welcome address that initially 11 utilities including Dhaka WASA took up the benchmarking initiative but now 33 utilities and their data are posted in the IB-Net web site and most of the utilities are implementing Performance Improvement Planning (PIP) based on benchmarking data. She added that Dhaka WASA has considerably improved their performance and received the "Water Performer of the Year Award 2011" at the Global Water Summit held in Germany in April 2011. She also added that despite many limitations each of the WASAs and city corporations has also some good performance. But WASAs and City Corporations other than Dhaka WASA are facing difficulties to implement large projects because of shortage of man power, lack of required technical expertise and skills, project management skills and institutional weaknesses.

She mentioned that peer to peers learning and identifying good practices and replication of the same can encourage the smaller WASAs and other utilities to learn and improve their capacity. The Additional Secretary cited that Dhaka WASA has gained many years of experiences in implementing large projects, managing critical issues, decision making and establishing comparatively better customer relation and maintaining liaison with policymakers and support agencies. She expected building network among the WASAs and city corporations for overcoming the problems to a great extent. She also expected WSP will support for exchange visits and networking among the WASAs in Dhaka, Chittagong, Khulna and Rajshahi and other city corporations to build the capacities of large water utilities. In this regard she added that this workshop will help to build effective relationship between Dhaka WASA and other large utilities so that they can learn and share the good practices and provide cross support and for improving the service delivery at respective utility level

Finally she expressed her sincere thanks to the honorable Minister, Secretary, Mayors and the participants for their kind presence in the workshop.

3.2. Key Note Paper presentation

Engr. Taqsem A. Khan, Managing Director of Dhaka WASA elaborated the detail function and challenges of Dhaka WASA in his presentation. More specifically, he briefed the workshop participants about the "Ghure Darao" (Turn Around) program of Dhaka WASA.

He reiterated that the main responsibility of Dhaka WASA is to provide safe water for drinking, industrial and commercial use, to ensure sanitation and good hygienic condition through proper disposal of domestic and other sewerage and to ensure efficient storm water drainage system in Dhaka city but Dhaka WASA faces numerous challenges while providing water supply and sewerage services in fast growing Dhaka city. The key challenges are as follows: (a) Dhaka city becomes as mega city and its high population density of 30,000 per sq. kilometer but in low income community the population density increases to 220,000 per sq. km; (b) unplanned city development and growth; (c) switching to service water from ground water extraction as 87% of supplied water is from ground water abstraction and ground water depletion is occurring at alarming rate and surface water is much more technically complex and expensive; (d) reduction of Non-Revenue Water (NRW); (e) informal settlements or LIC areas as many of whom have unauthorized connections; (f) low tariff rate; (g) large investments to treat surface water.

He mentioned that all these identified challenges Dhaka WASA, the following key challenges have been prioritized to address immediately in providing the improved water services to Dhaka WASA customers; (a) reduction of NRW; (b) increase of billing and collection efficiency; (c) reduction of operating expenses; (d) rehabilitation of water distribution pipelines; (e) 100% metering of distribute water; and (f) full implementation of on-line-billing system.

He added to address the above huge challenges, Dhaka WASA initiated pragmatically designed program like "Dhaka WASA Turn Around" 2010-12 and has the following:

Objective of "Ghure Darao" Program: (a) fully operational of Dhaka WASA Act 1996; (b) sustainability of Dhaka WASA; (c) Manage large investment; (d) shifting to surface water source from under ground; and (e) Dhaka WASA Profitable

What is "Ghure Darao" Progaram: (a) institutional reform for Capacity Building; (b) promoting transparency in all activities; (c) establishing accountability & chain of command; (d) fostering customer service excellence by changing the mindset of D-WASA staff; and (e) increasing organizational cost effectiveness by improving operating ratio

Challenges of Ghure Darao: (a) traditional mind setup; (b) trade union; (c) bureaucracy; (d) corruption; and (d) vested group interest

Achievement of Ghure Darao Till To Date: (a) increased of water production; (b) reduction of NRW; (c) improvement of operating ratio; (d) real time, on-line billing system; (e) improvement of billing & collection ratio; (f) improvement of chain of command; and (g) CBA – Management improved relationship.

Despite being a public service enterprise, Dhaka WASA stands to operate on a

commercial footing. Its operating ratio had been around 0.9 two years back. Currently it has been brought down to 0.79. Through efficient management on all fronts, the management plans bringing it further down to 0.70 by the end of 2012, which shall be significant achievement.

Finally he ascertained that more improvements in many areas would be possible by the end of 2012 and fulfill the pledge of "Dhaka WASA Turn Around (*Ghure Darao)* Program" that will contribute not only the ruling government election manifesto but also to contribute in millennium development goals.

3.3 Speech of Special Guest

Mr. Abu Alam Md. Shahid Khan, Secretary, LGD

Mr. Abu Alam Md. Shahid Khan, Secretary, Local Government Division expressed his pleasure for attending the workshop and sharing the experience of Dhaka WASA in implementing "Ghure Darao" (Turn Around) program.

He asserted that as a result of implementing this *Ghure Darao* Program, many changes have been taken place for which Dhaka WASA really deserves credit. The changes are unprecedented, which turns Dhaka WASA in to a credible service utility organization in the public sector. Once upon a time, there was serious water supply crisis during dry season in Dhaka city and people were seriously aggrieved with the poor service delivery of Dhaka WASA. In the face of threat of people's anger, Dhaka WASA had to manage distribution of safe water with the help of Bangladesh Army. But those days are over and Dhaka WASA can satisfy the increased demand of the city inhabitants by managing more production of supply water and efficient distribution of water. This is undoubtedly a great achievement, which need to be sustained in the coming days to meet the growing demand for water.

He mentioned that there are still many challenges for Dhaka WASA. At present 87% of supply water is met by abstracting ground water, which has put much pressure on ground water sources leading to rapid lowering of ground water layer in Dhaka city and threatening the ecological balance. The rapid depletion of ground water reserve poses heavy threat for the lives of 15 million people of Dhaka city. So there is no choice other than shifting to surface water. But the surface water sources around Dhaka city is heavily polluted with human and industrial wastes. In that case, Dhaka WASA has to think about costly water treatment of Buriganga River. For success of *Ghure Darao* program Dhaka WASA is required to take robust measures including improving bill collection system and regularization of illegal water connections. Besides, to pull down the increased demand of supply water, social campaign should also be undertaken for reducing wastage of treated water and rationalizing per capita water consumption rate.

Mr. Abu Alam Md. Shahid Khan also mentioned that today, the some achievement of Ghure Darao Program should not be confined in Dhaka WASA only. The experience should be shared by other utilities so that they become encouraged and come up with their innovative ideas to improve their situation. In this regard, the formation of water utility network among the large utilities is an excellent idea to share success and failure of each utility and find effective measures to improve the overall performance of the utilities. Mr. Abu Alam assured to extend all necessary cooperation and support from the Ministry to form the said water utility network.

3.4. Speech of the Chief Guest

Advocate Jahangir Kabir Nanak MP,
Hon'ble State Minister, MoLGRD&C

Advocate Jahangir Kabir Nanak MP, said in his speech as Chief Guest that the ruling party faced a serious water crisis in Dhaka City immediately after coming into power and the government had to overcome that problem with tough measures in water distribution system of WASA. Faced with such a precarious condition, Dhaka WASA undertook Ghure Darao program and the situation started to gradually improve. It is the commitment of present government to provide safe drinking water for the people and with this type of initiative of Dhaka WASA the government would like to sustain this commitment. He expressed his thanks to Dhaka WASA for its success in implementing Ghure Darao Program and hoped that all other utilities would follow the program of Dhaka WASA to improve their respective situation.

3.5. Speech of the Chairperson

Dr. Golam Mostafa
Chaiman, Dhaka WASA Board

Dr. Golam Mostafa, Chairman Dhaka WASA Board expressed his gratitude to WSP-SA for organizing this important sharing workshop. He said that due to rapid depletion of ground water reserve, there might be a serious water crisis in near future. The achievement of Ghure Darao program would disappear soon, if urgent preparatory measures are not taken to switch over from ground water abstraction to surface water treatment. The expectation of the people to Dhaka WASA is too high as Dhaka WASA is much advanced in contributing towards vision 2021 of the present government. In this regard, the success of Dhaka WASA must not be confined in Dhaka city only. The other water utilities and city corporations have many things to gain experience from Dhaka WASA and for this purpose, the networking and mutual cooperation among the large water utilities have to be enhanced. He urged all representatives of water utilities to make concerted effort to attain that goal.

4. 0. PRESENTATION AND DISCUSSION SESSIONS:

4.1. Presentation on overview of Benchmarking and Performance Improvement Planning (PIP):

The presentation was made by Mr. Zakir Hossain, Consultant of Water and Sanitation Program (WSP). In his presentation, the key discussion points were:
Benchmarking (BM) is an effective management tool for performance monitoring and formulating Performance Improvement Plans (PIP) for water utilities. Benchmarking works with IB-NET (International Benchmarking Network) toolkits and IB-NET toolkit is a set of core indicators such as:

(1) Water supply coverage (% of population);
(2) Per capita consumption (lpcd;
(3) Non Revenue Water (NRW) in %
(4) Connection metered in %;
(5) Staff / 1000 water connections
(6) Collection efficiency in %;
(7) Collection period in days;
(8) Operating ratio;
(9) Duration of supply in hours/day; and
(10) Sample passing on residual chlorine (%)

WSP-SA introduced BM & PIP in 11 utilities in 2005-06 including Dhaka and Chittagong WASA. The 11 utility's benchmarking data were presented in an inception workshop that was jointly organized by LGD & WSP-SA during 22-23 August, 2007 at Dhaka. The workshop on PIP then held on 6-7 February, 2008 at Chittagong in where how PIP to be prepared and to be implemented was elaborately discussed in a wider section of people including NGOs, sectors actors, academicians and different relevant government organizations representatives.

The representatives from 11 utilities presented their prepared PIP in a National Dissemination Workshop on PIP that was held on 21-22 May, 2008 at Dhaka that jointly organized by LGD and WSP. Following were the key findings came up through the group exercises in that workshop:

- Functional BM & PIP team that formed in each utility;
- The team would be responsible for data collection, analyze and reporting, and to execute the activities as per PIP;
- Monitoring the benchmarking & PIP;
- Survey on consumers' views; and knowledge sharing and dissemination; and
- Capacity building and to develop utility networking.

A team consisted from among the participants of the dissemination workshop developed the draft framework for urban water utility network and discussed in a workshop. Finally the "Urban (pourashava) Water Utilities Network" frame work was signed on March 15, 2009 in the same workshop with a view to enhance the capacity of the utility.

Progress on Benchmarking & PIP:

- 33 utilities benchmarking data are posted in IB-Net web site;
- More than 20 utilities prepared and implementing PIP and increases performance in respective areas.
- Bangladesh Water Utilities Data Book was published for 11 utilities ;
- 6 video-conferences was held with different countries at WBOD;
- Consumer level survey was done in RCC, Gazipur & Manikganj Pourashava and shared the survey findings;
- Bangladesh Urban Water Utilities Network formed initially with 8 pourashavas and now 30 pourashavas joined the network; and
- 8 network meetings with exchange visits were held.

Some results of Benchmarking & PIP

- Dhaka WASA succeeded in reducing NRW from 41% to 33%. Dhaka WASA has further plan to reduce NRW to 25% by 2013-14; Dhaka WASA also reduced collection period from 422 days to 212 days;
- Jessore Pourashava achieved the results by increasing water supply coverage to 84% from 52%; and reduced staff /1000 connections from 8.16 to 6.19;

Some results of Urban Water Utility:

- Increased revenue and closing balance: Tk. 890,000.00 as on June 2011:
  Lakshmipur Pourashava introduced Tk. 280/= for each flat of muli-

storied residential building in addition to normal water tariff of Tk. 320/= per month for 0.5 inch dia pipe connection (Result:)

- Increase in Collection efficiency:
  Faridpur Pourashava introduced bill connection through 9 (nine) Banks branches which resulted increased collection efficincey to 58% from 42%
- Reduction in NRW:
  Manikganj Pourashava introduced metering system and reduced NRW to 25% from 32%;
- Automation in billing:
  Haziganj Pourashava introduced computerized billing system which resulted higher Collection efficiency of 92%;
- Optimum use of production well
  Gazipur & Moulvibazar Pourashava introduced water flow meter at each production wells to ensure optimum utilization of production wells;
- Consumer satisfaction with water quality:
  Chandpur Pourashava introduced Water Safety Plan and provides water quality testing against any complaint from the consumers immediately.

Mr. Zakir Hossain highlighted some thoughts from the experiences of utility networking for Performance Improvement as:

- Each utility requires to share their benchmarking data and PIP with pourashava authorities;
- Orientation and hands on training are needed to the new utilities on benchmarking and PIP;
- Consumer level survey is important for getting participation and satisfaction;
- Sharing of regional experiences on utilities performance will build committment;
- Institutionalizing and mainstreaming BM & PIP are needed for sustainable operation and maintenance;
- Functional networking among large utilities like WASAs and city corporations will be one of the key capacity building approaches; and
- Resource allocation for further extension and development of the water utilities based on performance indicators will encourage for institutional strengthening of the utilities.

He concluded that each utility should initiate the benchmarking and PIP, even in rural piped water supply and PIP should be a part of the annual business plan of each utility.

4.2. Presentation on Dhaka WASA Turn-Around Programme – 2010-12"

Mr. SDM Quamrul Alam Chowdhury, Deputy Managing Director (RP&D), Dhaka WASA presented the "Dhaka WASA Turn-Around Program – 2010-12".

Dhaka WASA is an autonomous body and delivering services to ensure water supply, treatment & disposal of wastewater (sewage) & storm water drainage facilities in Dhaka and Narayanganj city. During the regime of Mughal, Dhaka was 10 sq.km but now it is 350 sq. km with population of 12.50 million and has projection to extend the area of about 1000 sq. km with population of 32.10 million.

Dhaka WASA provides services of water supply to 89.31% of population, sewerage about 30% and drainage by 38%. Dhaka WASA's present residential water tariff is

Tk. 6.34/= per cubic meter whereas in Delhi it is Tk 25/=, Karachi Tk. 12/=, Bangkok Tk. 26/=, Nairobi Tk. 18 to 35/= and Kampala Tk. 60/= per cubic meter. The source of water is the ground water that constitutes about 90% of total water supplied by Dhaka WASA.

Continued ground water table declining leads to planning for surface water collection but that needs huge investment and needs to face many challenges to sustain & expand the services: (a) Unplanned city development & informal settlement (Total population in Dhaka Metropolitan Area (DMA) in 2005 was about 9.1 Million. The Low Income Population is 3.4 Million (37%); The Population Density (persons per sq km) in Dhaka city ia about 30,000 but in low income settlement it is 220,000 (more than 7 times). In 2025 DMA Population is estimated to be 21 Million of when low incomes people will be 8 million (44% app). The low income population will be more crowded; (b) switching source to surface water & peripheral rivers; (c) large investment funding & revenue earnings; and (d) pollution control of surrounding rivers.

The challenges regarding profitable operation are: (a) cost of service; (b) reducing of NRW; (c) improvement of service quality; and (d) modernization.

He explained the background of WASA Act 1996 and mentioned that the "Turn Around Program" has been introduced to operationlize the Dhaka WASA Act 1996, for achieving sustainability of Dhaka WASA, to manage large investment, to shift from underground water source to surface water and ultimately to make Dhaka WASA profitable.

The Deputy Managing Director (RP&D), Dhaka WASA explained key features of the programe by addressing "What is Turn Around Program of Dhaka WASA". The features are (a) institutional reform for capacity building; (b) transparency in all activities; (c) accountability & chain of command; (d) customer service excellence; and (e) organizational cost effectiveness. He highlighted some of "Achievement of Turn Around Program of Dhaka WASA" as: (a) increase of water production; (b) reduction of NRW; (c) improvement of operating ratio; (d) real time, on-line billing system; (e) improvement of billing & collection ratio; (f) improvement of chain of command; (g) CBA – Management improved relationship; and (h) sustainability of Dhaka WASA. The "Challenges of Turn Around Program of Dhaka WASA" remained as (a) traditional mind setup; (b) trade union; (c) bureaucracy; (c) corruption; and (d) vested group interest.

4.3. Presentation from Rajshahi WASA

Md. Bashirul Alam

Managing Director (In-charge)

Rajshahi WASA

Mr. Md. Bashirul Alam, Managing Director (In charge) & Deputy Secretary, Rajshahi WASA presented the status of water supply including their good practices, opportunities and challenges. The salient aspects of his

presentation were as follows:

Rajshahi City is one of the seven divisional headquarters located in the north-western part of Bangladesh with population of 7, 87,180 in the area of 93.47 square kilometers. Rajshahi WASA has already practiced the Benchmarking & Performance Improvement Program (PIP) by using the International Benchmarking Network (IB-Net) format & the key indicators of

benchmarking data & PIP of Rajshahi WASA were as follows:

Sl	Key Indicators	Status
1.	% of population coverage by water supply	67 %
2.	Continuity / availability of water supply in hrs/day	12 hrs/day
3.	Consumption of water in lpcd	65 lpcd
4.	Operating ratio	1.30
5.	Collection efficiency (%)	54 %
6.	Non revenue water (NRW in %)	38 %
7.	Staff / 1000 connections	7.87

Mr. Alam also mentioned some of the challenges faced by Rajshahi WASA as: (a) poor tariff structure and revenue ; (b) limited source of surface water; (c) lack of efficient manpower; (d) contamination of drinking water by biological and chemical means; (e) lack of fund for taking development projects for production and treatment of water; (f) continuous falling of ground water table ; and (g) absence of central sewerage system in Rajshahi city.

Rajshahi WASA is undertaking some activities to overcome some of the challenges which are:

Challenges	Initiatives	Activities
1. Poor tariff structure and revenue due to: Poor billing and collection system; Assessment of tax is on the basis of floor and diameter of pipe; Lower tariff rate (3.86 Tk/m3); Lower collection efficiency (54%); Lack of bill paying habit of the citizens; High non-revenue water (38%)	Increase number of house connection; Installation of water meter at every house; Increase rate of water tariff; Training of staffs related to tax collection; Motivation of the citizens to pay tax regularly; Decrease non-revenue water (from 38% to 23%)	Initiation of computerized billing system; Payment of bill through banks; With the prior permission of the government or Rajshahi WASA Board tariff rate will be increased; Training of tax collector by experienced Dhaka WASA officials; Campaign for paying bill regularly through miking, leaflet etc; Reduce water leakage; Disconnection of illegal connection; Preparation of GIS for pipe line network system
2. Limited source of surface water due to: the Padma river and other wetlands are gradually silted and dried up and point of source far distance (15-30	Optimum use of surface water on priority basis	Establishing surface water treatment plant and installation of transmission pipe from the surface water source

Challenges	Initiatives	Activities
km)		
3. Lack of efficient manpower	Approval of manpower and organgram is still under process in the concern authority.	After getting the approval of organogram Rajshahi WASA will appoint manpower.
4. Contamination of drinking water due to chemical contaminants: excess hardness, iron (2.4-3.5 mg/L) and manganese (1-2 mg/L) and bacteriological.		Installation of water test laboratory; Installation of water treatment plant; and provision for washout.
5. Lack of sufficient fund for taking development projects for production and treatment of water	Rajshahi WASA is looking for development partners	An MOU has been signed between the government of Bangladesh and Korea on Master Plan preparation
6. Continuous falling of ground water layer	Trying to use optimum use of surface water	Establishment of surface water treatment plant.
7. Absence of central sewerage system in Rajshahi city	Rajshahi WASA is looking for development partners	

The Managing Director of Rajshahi WASA concluded that Rajshahi WASA is new and the challenges/problems are complex in nature but not impossible to solve if sufficient fund and technical assistance are available. He put request to the donor agencies and ministry for allocation of fund and technical assistance from Dhaka WASA and WSP-SA.

4.4. Presentation from Chittagong WASA

Md. Nurul Afser

Executive Engineer, Chittagong WASA

Mr. Md. Nurul Afser, Executive Engineer and member secretary of the benchmarking and PIP team of Chittagong WASA presented the status of water supply including their good practices, opportunities and challenges. The key aspects of his presentation were as follows:

At present, Chittagong WASA is supplying 200-210 MLD water against a demand of 500 MLD and there are two existing water treatment plants, namely Mohara WTP (surface water from river Halda) and Kalurghar IRP (ground water from Kalurghat deep tube-wells) , 91 deep tube-wells, 14 reservoir & elevated tank, 3 booster stations and 625 km of pipe line network. The present coverage ratio is about 40% and NRW is 19%. He pointed that the water shortage and future water demand, development of the water supply facilities are major challenges to Chittagong WASA.

He explained the level of services for the period of FY 2010-2011 and the performance improvement plan as below:

Sl.	Name of Performance Indicators	Status	Standard status
1	Water Supply coverage (%)	40	100
2	Per capita consumption (Ipcd)	96	145
3	Non-revenue water (%)	22	23
4	Connection metered (%)	89	100
5	Staff / 1000 connections (ratio)	14	5.0
6	Samples passing on residual chlorine (%)	100	100
7	Collection efficiency (%)	101	90
8	Operating ratio	1.09	0.70
9	Duration of water supply (hrs./day)	10	24.0

Performance Improvement Action Plan-FY 2011-12:

A. For increase water supply coverage

Process	Activities
Maintenance & repairs of existing pump, motor etc. (under yearly maintenance program)	Estimating, tendering, given work order for repairing
Regeneration of old deep tube well (under yearly maintenance program)	Estimating, tendering, given work order for regeneration.
Construction of 20 Nos. deep tube well under Emergency Water Supply Project	Estimating, tendering, given work order for construction.

Mr. Nurul Afser also added that performance improvement plan will contribute a little but urged for implementation of others projects of World Bank supported and JICA supported projects as early as possible. In this regard, Chittagong WASA would expect needs all support to implement the large projects from other WASAs and the Ministry.

4.5. Presentation of Khulna WASA

Mr. Md. Rejaul Islam

Executive Engineer, Khulna WASA

Mr. Md. Rejaul Islam, Executive Engineer, Khulna WASA highlighted the water and sanitation status and the key challenges as:

- Khulna is the 3rd divisional town having population about 1.5 million.
- Water Supply System is inadequate in respect of coverage as well as quality.

- Piped water supply is only 13% . 37% coverage is done by 10,000 HTW .
- Large portion of the distribution pipe is very old, which were not properly designed and maintained.
- Present water supply is entirely dependent on ground water.
- Demand for safe drinking water is increasing rapidly in Khulna City.
- Due to limitation of ground water source, future demand cannot be met by ground water.
- Therefore, it is essential to switch over to Surface Water Supply System.

Challenges:

- Khulna area is vulnerable in the context of potential climate change impact as salinity is increasing both in surface water and ground water;
- Shortage of efficient manpower as Khulna WASA recently formed; and
- No sewerage line in the city.

4.6. Presentation from Sylhet City Corporation

Engr. Syed Hossain Jamal

Executive Engineer (Water Supply)

Engr. Syed Hossain Jamal, Executive Engineer (Water Supply), Sylhet City Corporation briefed about the status of water supply and challenges of Sylhet City and had the following key points.

In Sylhet city, piped water supply system with treatment plant was introduced in 1995. The system has 13 production tube-well and 3 OHT. The system can supply water at the rate of 25 m^3/day, which covers only 30% of the population of Sylhet City Corporation. At present, there is lack of technical manpower (e.g. mechanics) in the city corporation.

The NRW is about 50% due to illegal household connection. The revenue and collection efficiency is very low. In this regard, Sylhet City Corporation seek support from WSP-SA to conduct consumer level

survey and disseminate the survey findings to the counselors, civil society and the consumers to motivate for increase in tariff, timely payment of bills and convert illegal to legal connections. The City Corporation is constructing a surface water treatment plant with support from DPHE. The plant will use the water from the river Surma to produce 69 MLD and supplying water to the city dwellers.

4.7. Presentation from Rangpur Pourashava

Mir Tofazzol Hossain,

Water Superintendent

On behalf of Rangpur Pourashava, Mr. Mir Tofazzol Hossain, Water Superintendent, Rangpur Pourashava presented the status, opportunities and challenges of water supply

and had the following key aspects:

Rangpur is one of the oldest municipalities in Bangladesh, which was established in the year 1869. The present area of Rangpur Pourashava (with extended area) is 203.19

sq. km and population is about 1 million. The town has already Turn into a divisional head quarter of "Rangpur Division". Rangpur Municipality will be declared as a City Corporation very soon.

The pipe water supply system of Rangpur Pourashava was established in 1961. Rangpur Water Supply system has now about 135 km of pipe network and 6 production wells, 2 iron removal plant (IRP), 4 overhead tank, 2 high lift pumps. Existing house connections are 5300 & street hydrant 29 in number.

Some performance indicators

SI	Performance Indicators	FY 2010-11 Status	Standard value
01	Water supply coverage (%)	14.66	100
02	Per capita water consumption (lpcd)	69.81	145
03	Non Revenue Water (%)	28.24	25
04	Staff/1000 connections (ratio)	5.61	5
05	Collection efficiency (%)	40.57	90
06	Operating ratio	1.58	0.7
07	Duration of supply (hr /day)	8	24

Factors considered for taking areas of performance improvement in Rangpur Pourashava for the FY 2011-2012

SI	Areas of performance Improvement	Factors considered in selection
01	Increase water supply coverage from 14.66 to 25%	Water supply coverage very less than standard of 100%
02	Reducing NRW from 28.24 to 25%	As pourashava will able to reduce with their own resources
03	Increase collection efficiency 40.57 to 50%	As collection efficiency is very less than of standard and pourashava will be able with their own resources

Performance Improvement Action plan (PIP) for the period 2011-2012

Process	Activities	Action	Time
Water supply coverage	Installation of new pipe line and production well.	Water supply coverage will increase by installation of pipe line, at the extension area with supported by DPHE - 37 District Water Supply Project. Installation of new production tube-well by BMDF & Pourashava own source.	1 year
Reduce NRW	Identify illegal connections, identify leakage & reduce number of street hydrant	Legalize the illegal connection & wastage control of street hydrant, repair of pipe line leakage	Continued
Increase of collection efficiency	Mobilize consumer & take legal action	Impart notice to defaulter for disconnection / legal action, door to door visit and mobilize consumers for increasing of collection efficiency	Continued

Opportunities for Rangpur Pourashava:

- ❑ Rangpur Pourashava is an active member of the Urban Water Utility Network and has opportunity to build capacity of PWSS;
- ❑ Water table is very closer to ground level;
- ❑ Arsenic & other similar elements is tolerable limit.
- ❑ Rain water may be used as water source

Challenges for Rangpur Pourashava

- ❑ Consumers are reluctant to pay more water tariff;
- ❑ Iron content is high in water of many areas;
- ❑ Provide piped water supply to the newly extended area (more than 150 sq. km);
- ❑ Rehabilitation of damaged & unserviceable water supply related infrastructure (like A.C pipe line, pump-motor etc.);
- ❑ The nearest surface water source of Teesta & Ghaghot River cannot be used of because of insufficient water flow of river.
- ❑ No scope for water quality testing.

4.8 Open Discussion Session:

Mr. Shams Uddin Ahmed, Deputy Secretary (WS-1), LGD facilitated the session by inviting questions from the participants and encouraging concerned participant to respond. Most of the questions were addressed to Dhaka WASA and some were to the ministry. The summary of responses is described below:

Response by Managing Director, Dhaka WASA

- D-WASA is using only a few indicators for water quality in Turn Around Program
- There is no incentive structure for good performing staffs except annual

increment. But Dhaka WASA has planned to introduce performance based incentive system, although CBA wants flat increment for all staff.

- All staffs of Dhaka WASA are working under the same management. Managing Director and four Deputy Managing Directors are hired by Dhaka WASA Board with approval from the government and all other staffs are recruited by WASA management (Executive Body)
- At present, Dhaka WASA provides water to LIC or in slum areas through NGOs. Only 20% of LIC areas are legally covered by Dhaka WASA and the remaining 80% are supposed to be covered by NGOs under agreement with Dhaka WASA. Dhaka WASA has laboratory facilities which other utilities can use.
- Dhaka WASA will soon organize training for capacity building of staffs of other utilities.
- Dhaka WASA has already outsourced the operation of call center for customer excellence; and
- Dhaka WASA has investment plan for waste water management.

Supplements' Response / Suggestion by

Mr. Milon Kanti Barua

Program Head,
BRAC WASH Program

Sharing workshop at the zonal level directly with the people, ward commissioners, NGO and civil society representatives organize by Dhaka WASA will raise awareness among the people and help solving many problems related to tariff collection and regularization of illegal connection that enable to increase revenue and quality water.

Supplements Response by

Mr. Shahjahan Ali

Governance Adviser,
PSU-LGD

- PSU has already developed cost sharing strategy which has been approved by LGD. The strategy is going to be introduced soon and this will may guide about tariff fixation and to maintain its uniformity if suited.
- The government is going to prepare water act which will be implemented with involvement of a number of ministries and departments having functions in relation to water resources. To ensure coordination, a central regulatory body will work which is also expected to regulate abstraction of ground water for drinking as well as for commercial purposes.

Supplements' Response/Suggestion by

Mr. Abdul Motaleb

Sr. Water and Sanitation Specialist

WSP-SA

- Sharing workshop organized by Dhaka WASA at the zonal level will help to compare the benchmarking information with the views of consumers. Based on customers' views, Dhaka WASA can customize their future plan and take necessary measures accordingly. WSP-

SA can support Dhaka WASA in this regard..

- Consultation with LIC is also important to know their real situation. NGOs will be interested to help organize this kind of grass root consultation with the LIC. WSP-SA is also interested to support this consultation process.
- Lot of discussions held about the use of surface water. Prior to such decisions at the policy level, it is necessary to know about economic viability of using surface water and sustainability of the surface water sources. WSP-SA would like to participate in any feasibility study with support from PSU.
- Water quality problems especially about hardness, arsenic and heavy metal are reported by both supply and demand side. There should be a water safety campaign to know the status of supply and demand side and accordingly an action plan / project can be taken to redress problems of water quality. .

Response by

Mr. Shams Uddin Ahmed

Deputy Secretary (WS-1), LGD

- As per WASA act, water tariff may be increased by 5% annually. For more increase of tariff, permission has to be taken from the Ministry with enough justification.
- About installation of hand tube well in Pourashava piped water area, City Corporation / Pourashava can give permission depending on capacity and operational condition of the piped water system.
- For capacity enhancement, Dhaka WASA can arrange training for the staff of other utilities. In case of apprentice, they can be attached with Dhaka WASA for hands on training. Training should be full time for the participants coming from other utilities and they should be paid.

4.9. Presentation on challenges in delivering water supply services in small town

Mr. Akhteruzzaman, Consultant, WSP

Mr. Aktheruzzaman in his presentation highlighted the relation between supply and demand side of water, challenges of piped

water supply and importance of water networking and explained the following issues:

Challenges on supply side

(a) Non-availability of sustainable source for piped water supply; (b) competition with hand tube-well in the Pourashava piped water supply area; (c) accelerated urban growth exerting pressure on piped water supply system; (d) lack of capacity of service providers (utilities) and poor service level; (e) resource constraint for investment; (f) improper utilization of resources; (g) increased salinity, hardness and heavy metal contamination; (h) inappropriate technology and high capital cost; and (i) tendency of giving free services.

Challenges on demand side

(a) Invisible poor household connection and damaged pipe fittings; (b) lack of awareness; (c) high demand of rich people for water (high consumption rate); (d) misuse and leakage of supply water; (e) illegal connection; and (f) income disparity.

Clients are integral part of urban piped water supply system. It is not wise to stop tube-

well installation at household level in pourashava piped water supply area. Rather tube-well installation should be discouraged for its risk involved with arsenic contamination or abstracting unsafe water. This problem can be overcome by establishing a good cliental relation with the people living in piped water supply area by sharing information with the consumers, consumer level survey and improving on the service quality. People will then automatically shift to use of piped water supply and the tendency of installing hand tube-wells will be reduced in piped water supply area.

Supplements' Views of

Mr. Shams Uddin Ahmed

Deputy Secretary (WS-1), LGD

Mr. Shams Uddin Ahmed agreed with Mr. Akhtaruzzaman that installation of hand tube-well should not be legally stopped in piped water supply area, if services are poor on the supply side. But to protect underground reserve and to promote increased use of piped water supply, hand tube-well installation should be discouraged and restricted so that people change their mindset and gradually shift to the usage of piped water supply.

5.0. GROUP EXERCISE

Moderated by Mr. Shams Uddin Ahmed, Deputy Secretary, LGD

The participants were divided into three groups to find challenges in managing water supply in large cities of Bangladesh and

possible areas of cooperation among the large water utilities in Bangladesh in the following areas:

- Project Management
- Operation and Maintenance
- Human Resource Management
- Financial Management
- Customer relation
- Other

Group Presentation

The summary of findings of group presentations of the three groups is given below:

Sl.	Management Areas	Challenges	Possible areas of cooperation
	Project Management	• Lack of staff and experienced manpower; • Lengthy project approval system; • Limitations in procurement process (PPR); • Delayed fund release; • Inconsistencies between physical and financial figures in DPP; • Lack of inter organizational coordination; • Lack of authority;	Technical Assistance from Dhaka WASA regarding: • Contract management • Procurement processing • Liaison with LGD; • Regular meetings among WASAs and LGD

Sl.	Management Areas	Challenges	Possible areas of cooperation
		• Difficulties in land acquisition. • Consultant management	
	Operation & Maintenance	• Lack of skilled and committed manpower; • Gap between production, distribution and demand; • Pressure on underground source • Old equipments, pumps and deplorable pipe network; • Inadequate and intermittent power supply; • Difficulties in detecting and repairing leakages; • Absence of meters and devices to collect various types of data; • Lack of regular repair and maintenance; • Lack of O&M Fund	• Technical training for operators and plumbers • Exchange visits among operative staff for skill development • Sharing of facilities and technologies with Dhaka WASA; • Adaptation of new technologies. • Planning and allocating fund for regular and emergency repairs and maintenance. • Installation of electric panel board, bulk meters and water meters, etc.
	Human Resources Management	• Lack of training policy; • Inadequate training facilities; • Lack of reward and punishment practice; • Inadequate manpower; • Lack of performance evaluation; and • Nepotism in hiring people. • Lack of right person in the right place;	• Recruitment based on demand of the job • Share the recruitment policy of Dhaka WASA; • Share staff appraisal system with Dhaka WASA; • Regular staff meeting to share all human resources management & organizational issues
	Financial management	• Lack of understanding the importance of FM; • Conventional accounting & FM system; • Manual billing and collection system; • Tariff rationalization; • Release and use of fund; • Poor revenue collection; • High operating costs;	• Automation of financial management(billing, accounting, all payment, procurement); • Training on Financial management • Cost analysis and tariff setting • Cost minimization of water supply.
	Customers Relations	• Change in mind set of both utility staff and customer; • Lack of customer awareness; • Lack of bill payment habit of the customers; • Lack of thinking “customer is the king”.	• Knowledge management. • e- information and sharing; • Establish help desk / information center; • Consumer survey for getting feedback • Awareness building events

Sl.	Management Areas	Challenges	Possible areas of cooperation
		• Absence of grievance redressing mechanism	to share the organizational issues and consumers responses
	Others	• Delay in fund allocation and release; • Lack of transparency and accountability; • Lack of autonomy • Illegal demand of the pressure groups; • Improper contract management	• Investment according to demand and priority • Initiate e-governance and open discussion forum • Own resource generation for greater autonomy • Seek support from peers for contract and consultant management

Mr. Shams Uddin Ahmed, Deputy Secretary, LGD added two more points as challenges in relation to customer relation, i.e. introducing one stop service and social responsibility. As part of social responsibility, the utilities must care about peoples' conveniences during project implementation, repairing and maintenance work in the public places. The utilities should involve community people in their project implementation process.

Mr. Taqsem A. Khan, Managing Director, Dhaka WASA mentioned about some policy related challenges. He said that Dhaka WASA act has been formulated in 1996, but still the Act has not been in full operation.

Group presentations

Many things have been spelled out in the Act, but due overlooking, WASA people often misinterpret and practice in different way. Authority is delegated in the Act for decision making, but authority is not properly exercised. To face this challenge, it is essential to change of mindset of the policy level people and take more responsibility to make the Act fully operational.

Group presentations

Mr. Abdul Motaleb, Senior Water and Sanitation Specialist, WSP-SA appreciated the group findings related to procedural and operational challenges and need of cooperation among the water utilities to overcome these challenges. But, coordination among the large, medium and small water utilities is a very difficult task which can somehow be managed by forming a platform of network under leadership of local government institutions.

Mr. Shams Uddin Ahmed, Deputy Secretary (WS-1), LGD finally summarized the findings of group work. He said that project preparation is a long bureaucratic process and persons involved with the process often do not perform properly resulting in errors and much delay for which project suffers. Planning for maintenance is often ignored in the project planning and for

this reason, the maintenance works are mismanaged. Adequate manpower cannot always guarantee better customer services if they are not committed to their responsibilities. So, the service provider must have cooperating mindset for better customer relation and improved services. Accountability and transparency is highly desired in financial management, but these are not ensured due to lack of skilled accounts and financial personnel at operational level. There are also many problems in the policy level due to lack of clear understanding and ownership of the WASA Act, for which full implementation of the Act remains always a challenging task for the utilities. However, all these challenges can be overcome to a large extent by instilling sense of accountability and responsibility among the utility staffs and discharging duties for the clients accordingly.

6. RECOMMENDATIONS

The workshop converges for the following recommendations that have been extracted from the discussions and group works in the day long workshop:

- The success and good experience of Dhaka WASA may be shared and adopted by other utilities through formation of network among the large utilities;
- The respective WASA should practice Benchmarking and PIP by collecting realistic data, analysis of the same and take appropriate actions and performance improvement plan.
- Dhaka WASA may extend their technical assistance to other large water utilities especially in project management, O&M, social responsibility, accountability, etc. It may be considered to provide professional support from Dhaka WASA to others.
- The water utilities should organize third party consumer level survey to know the views of the consumers about performance and service level of the utilities.
- Dialogue and awareness events are needed to share the critical issues of water supply based on Benchmarking data and consumer level survey and bring the consumers on board as integral part of the water supply system.
- To protect the ground water reserve, the large water utilities should explore sustainable surface water sources for treatment and supply. In this regard, an assessment should be conducted in few towns to test the technical and economical viability of surface water treatment and supply.
- Dhaka WASA should extend the support for training of staff from other utilities. The other utilities should have the opportunity to send participants to Dhaka WASA's own training program.
- The laboratory facility of Dhaka WASA and local DPHE should also

be accessed by the other utilities having no such facilities.

- WSP-SA may support for organizing several workshops for developing the framework for Water Utilities Network and experience sharing events for large water utilities.
- LGD may take the role for coordinating and facilitating such network for strengthening the water utilities.

7. CLOSING

Mr. Abdul Motaleb, Senior Water and Sanitation Specialist, WSP-SA

At the closing session, Mr. Abdul Motaleb thanked the participants for the good recommendations for improving the service delivery. He prioritized them as (i) formation of greater network for sharing of experiences among the water utilities, which may help to address their challenges and (ii) to organize consultation sessions in particular with the low income communities (LIC) at field level of Dhaka WASA and in large utilities.

He added that the next course of action can be to form a water utility network among the WASAs, City Corporations and big Pourashavas with facilitation from LGD. After formation of network, sharing workshop may be organized in each utility where Dhaka-WASA management personnel can attend as resource person. Concept note may also be developed for developing a framework for the network and organizing workshop at different levels for addressing and the demand and supply gaps. WSP-SA will provide necessary support in this regard.

Closing Remarks by Ms. Zuena Aziz, Additional Secretary, LGD

The workshop on sharing Turn Around Program of Dhaka WASA and networking for inclusive water supply in the large cities is a successful one, as many things, issues and challenges pertaining to safe water supply have been thoroughly discussed in the workshop. The group discussion was also a good exercise to find challenges and areas of cooperation among the water utilities. Many innovative ideas and good practices of one utility can be shared to others through networking. This network is expected to bring more cooperation among the utilities

and provide better services for the people. She urged WSP-SA to provide necessary support in this regard. She also added that from now the utilities will take up the necessary step as per recommendations. The Additional Secretary, LGD expressed that all sorts of possible support will be provided from the LGD in this regard. She also expressed her pleasure for successful workshop outcomes and thanked all the participants, all concerned for organizing this event.

ANNEX - 1

Workshop on
Sharing the Turn around program of Dhaka WASA and networking for inclusive water supply in large cities
April 16, 2012
Pan Pacific Sonargaon Hotel, Dhaka

Workshop Schedule

Time	Session	Facilitators
09:00-09:30	Registration	
09:30-10:15	Inaugural Session: Introduction & welcome address Key note paper presentation Speech from special guest Inaugural speech of chief guest Chairperson speech	 Additional Secretary, LGD Managing Director , Dhaka-WASA Secretary, LGD, MoLGRD&C Hon'ble State Minister, MoLGRD&C Chairman, Dhaka WASA Board
10:15-10:30	Tea break	
10:30-11:00	Presentation on Benchmarking and PIP (Background & current status)	WSP-SA
11:00-11:30	"Ghure Darao" DWASA Programme	DWASA
11:30-13:00	Status of water supply in large water utilities (opportunities, challenges and good practices)	WASAs and CCs representatives
13:00-14:00	Lunch	
14:00-15:30	Group work and presentation	WSP-SA
15:30-15:45	Tea	
15:45-16:30	Planning for the future	WSP-SA
16:30-16:45	Closing	Additional Secretary, LGD
16:45-17:00	Tea	

ANNEX- 2

List of Participants

Workshop on Sharing the Turn Around Program of Dhaka WASA and Networking for Inclusive Water Supply in Large Cities

Venue: Pan Pacific Sonargaon Hotel, Dhaka
Date: April 16, 2012

Sl.	ame	Designation & Organization	Contact Details
DHAKA WASA			
1	Mr. Golam Mostafa	Chairman , Dhaka WASA Board	
2	Mr. Taqsem A. Khan	Managing Director	8116792
3	Mr. Mahbubur Rahman	Deputy Managing Director (Admn)	01819-071409
4	Mr. SDM Quamrul Alam Chowdhury	Deputy Managing Director (O&M) & Chief Engineer	01720-30403
5	Dr. Jamal Ahmed	Board Member	01713-018217
6	Mr. Uttam Kumar Roy	Deputy Managing Director (Fin) & Commercial Manager	01818-393939
7	Mr. Nasir Uddin Ahmed Chowdhury	Deputy Chief (Planning)	01711-581904, nasir9563@yahoo.com
8	Mr. Md. Serajuddin	Additional Chief Engineer & PD – Syedabad Phase-II	9112361
9	Mr. Md. Shajahan	Additional Chief Engineer & PD-DWSSDP, ADP	01713-031267
10	Mr. Bazlur Rahman	Additional Chief Engineer (RP&D)	01718-105129
11	Mr. Md. Abul Kashem	Project Director, WB Project	01552-341854
12	Mr. Md. Delwar Hossain	Sr. System Analyst (GIS)	01552-339982, mdhdhaka@yahoo.com
13	Mr. A. Karim Patwary	Deputy CRO (CF)	01737-512022
14	Mr. Zakaria Mahmud	Deputy Chief	01726-966136
15	Mr. Md. Zaki Mostafa Chowdhury	SE, MODS Circle-1	01819-221482
16	Mr. Md. Akhtaruzzaman	SE & PD	01819-271645
17	Mr. Md. Rafiqul Islam	Executive Engineer	01711-158251
18	Ms. Moushumi Khanam	Assistant Secretary	01712-601847
19	Mr. Md. Salauddin	Computer Operator	01552-639433
CHITTAGONG WASA			
20	Engr. A.K.M. Fazlullah	Managing Director	01819-345215
21	Engr. M.A. Karim Chowdhury	Chief Engineer	01736-383652
22	Mr.Md. Altaf Hossain Chowdhury	Commercial Manager	01711-455505
23	Mr. Nurul Absar	Executive Engineer (DD)	01726-38454
24	Mr. Md. Altaf Hossain	Commercial Manager	
RAJSHAHI WASA			
25	Mr. Md. Bashirul Alam	Managing Director (In-charge)	01715-782602
26	Mr. Shariful Islam	Secretary	01833-066600
27	Mr. Parvez Mamud	Executive Engineer	01713-098863
KHULNA WASA			
28	Mr. Md. Abdullah, PEng	Managing Director	01720-030066
29	Mr. Nishchinta Kumer Podder	Secretary	01716-269743
30	Mr. Rezaul Islam	Executive Engineer	01713-237217, xen.kwasa@gmail.com
SYLHET CITY CORPORATION			
31	Engr. Syed Hossain Jamal	Executive Engineer (WS)	01711-967910
BARISAL CITY CORPORATION			
32	Mr. S.M. Shafiqul Islam	Executive Engineer (WS)	01711-207937

Sl.	ame	Designation & Organization	Contact Details
RANGPUR POURASHAVA			
33	Mr. A.K.M. Abdur Rouf Manik	Mayor	01819-120877
34	Mr. Md. Emdad Hossain	Executive Engineer	01718-516287
35	Mr. Mir Tofazzol Hossain	Water Superintendent	01716-776620, mirtofazzaol12@gmail.com
DEPARTMENT OF PUBLIC HEALTH ENGINEERING (DPHE)			
36	Mr. Md. Nuruzzaman	Chief Engineer	
37	Mr. Md. Sadeq Hossain	Additional Chief Engineer	01731-812773, sadequehossain@yahoo.com
38	Mr. Md. Nurul Islam	Additional Chief Engineer	01554-322033
39	Engr. S. Shabaz Hossain	Superintending Engineer & PD	01911-340223
SECTOR REPRESENTATIVES			
40	Mr. Shafiqul Alam	Urban Development Specialist, Unicef	01762-172217
41	Mr. Md. Rafiqul Islam	SPO, Asian Development Bank	
42	Mr. Kazuyuki Kawahara	PM, JICA Project, AAN	01713-302822
43	Mr. Shahjan Ali	Governance Adviser, PSU, LGD	01811-410153
44	Mr. Md. Abdur Rauf	Assistant PD, PSU, LGD	01711-576791
45	Mr.Tanvir Hossain	Young Professional, WaterAid Bangladesh	01730-095588, tanvir.hossain@wateraidbd.org
46	Mr. Milon Kanti Barua	Programme Head BRAC-WASH	01714-891375 Milon.kb@brac.net
47	Dr. Hasina Banu	Research Specialist, HLP	01711-487458
MINISTRY OF LOCAL GOVERNMENT, RURAL DEVELOPMENT & COOPERATIVES			
48	Adv. Jahangir Kabir Nanak, MP	Honorable State Minister, MoLGRD&C	
49	Mr. Abu Alam Md. Shahid Khan	Secretary, MoLGRD	
50	Ms. Zuena Aziz	Additional Secretary, LGD	
51	Mr. Shams Uddin Ahmed	Deputy Secretary (WS), LGD,	01711-878304
52	Ms. S. Salma Jafreen	Deputy. Secretary, LGD (WS-2)	01745-706869
53	Mr. Md. Ahsan Karim	PRO, MoLGRD	01712-241903
WORLD BANK DHAKA OFFICE & WSP-SA			
54	Mr. Arif Ahmed	Water and Sanitation Specialist,World Bank	01713-049992
55	Mr. Mark Ellery	Regional Water & Sanitation Specialist, WSP-SA	01730-303890
56	Ms. Rokeya Ahmed	Water & Sanitation Specialist, WSP-SA	
57	Mr. M. Rahmat Ali	Communication Consultant, WSP-SA	01715-090989
58	Mr. Abdul Motaleb	Sr. Water & Sanitation Specialist, WSP-SA	017133452890
59	Mr. Md. Akhtaruzzaman	STC, WSP-SA	01714-066289
60	Ms. Nusrat Hossain	Team Assistant, WSP-SA	0182-9153030
61	Mr. A.K.M. Waliul Islam	STC, WSP-SA	01714-499904
62	Mr. Zakir Hossain	STC, WSP-SA	01711-906843

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Shams Uddin Ahmed
Deputy Secretary (WS-1), LGD

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