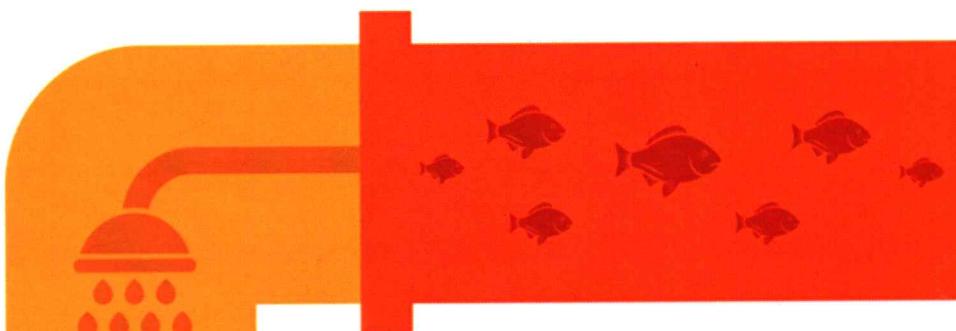


WASA



VISION TO TURN AROUND
GO GREEN AND GO DIGITAL

Message

It is my pleasure to know that Dhaka Water Supply and Sewerage Authority (DWASA) is going to publish the Annual Report for 2020-2021 to exhibit the overall activities and development of the organization.

Dhaka WASA, a service-oriented autonomous commercial organization with corporate culture in its management & operation, is working to ensure better water supply and sewerage facilities for the citizens of Dhaka City. The organization is striving to achieve its vision, which is to be the best water utility in the public sector of South Asia by establishing an environment friendly, sustainable and pro-people water management system. As per the 'Vision 2021' adopted by the Honorable Prime Minister for reconstructing Bangladesh as a middle-income country, Dhaka WASA initiated the 'Turn Around Dhaka WASA' program in 2009 and consequently achieved the capability to produce more water than its demand in the last 9(Nine) consecutive years. One of the major missions of Dhaka WASA is to reduce dependency on groundwater. I am glad to inform you that Padma (Jashaldia) Water Treatment Plant, as planned has already gone into operation in full swing. Dhaka WASA is ambitious to successfully implement Gandharbpur Water Treatment Plant by 2023 and Saidabad Water Treatment Plant Phase-III by 2024. As part of the Sustainable Development Goal (SDG), our organization is also working for getting Dhaka city under sustainable sanitation services. Accordingly, Dashekandi Sewage Treatment Plant project is almost complete and hopefully, will go into operation in 2022. Four more Sewage Treatment Plants will also come up in near future.



Dhaka WASA introduced District Metered Area (DMA)- an innovative technology and ensured pressurized 24x7 water supply to Dhaka City dwellers. This is also a tool for measuring & reducing Non-Revenue Water (NRW). To make Dhaka WASA fully digitized, DWASA has also introduced a real-time online billing system, online water connection service, online recruitment process, e-Filing, e-Procurement, and so on. Additionally, operation and maintenance activities are being performed with an automated SCADA system. Moreover, Introduction of Water ATM and water supply services to Low-Income Communities (LIC) has turned Dhaka WASA into a pro-people service provider.

Lastly, I would like to duly address the losses and sufferings of the whole world due to COVID-19 Pandemic. I am very happy that employees of Dhaka WASA worked 24x7 during the lockdown period to ensure the water and sewerage facilities of Dhaka City dwellers. Dhaka WASA will go on thriving to uphold Bangabandhu's Shonar Bangla and keep on updating itself to be more customer-friendly, practicing transparency & accountability.

I wish a grand success of Dhaka WASA.

Engr. Taqsem A Khan
Managing Director, Dhaka WASA

Vision

To be the 'Best Water Utility' in the Public Sector of South Asia-Ensuring an environment-friendly, sustainable and pro-people water supply management system.

Mission

- To reduce the dependency on ground water.
- To implement the projects effectively and speedily.
- To practice a corporate culture in its management and operation.
- To ensure a high level of transparency and accountability in all its service and activities.
- To improve the efficiency and reduce operating cost.
- To constantly seek way to serve our customers.

Strategic Planning

- # Converting surface Water Supply Source to 70% from existing 22% for sustainability.
- # Establishing DMA for keeping NRW below 10% and ensuring 24/7 pressurized & portable Water supply.
- # 100% legal water supply to LIC area by Dec 2021 for ensuring pro-people water management.
- # Establishing 100% Sewerage System for protecting Environment.

Achievements of DWASA under 'Turn Around Programme'

- In 2009, under the Leadership of Hon'ble Prime Minister Sheikh Hasina, the whole Water Supply Policy has been turned into Environment Friendly, Sustainable and pro-people water management system. In achieving this 'change management policy' DWASA set its vision and mission and declared an action plan called Dhaka WASA Turn-around Program. The achievement of Turn-around Program, so far, are briefly as follows:
- Dhaka WASA is currently capable of producing 265 crores litres of water daily as against the daily demand of 250-255 crore litres.
- The revenue income of DWASA has been increased upto more than 1.5 billion taka from 16 billion taka in year 2020-2021.
- Implementing mega projects both in water supply and sewerage sector.
- The operating cost has been reduced from 0.90 to 0.62.

- Introducing modern technology in water supply management, named District Metered area (DMA) by which system loss or (NRW) is reduced from 40% to 5%.
- Bringing low income Community (LIC) or slum dwellers under safe & legal water supply network.
- Introduced 100 percent online billing system including payment through SMS as well.

Milestone...

Introduced ' Digital WASA Green WASA' culture to inspire green practice in everyday work.

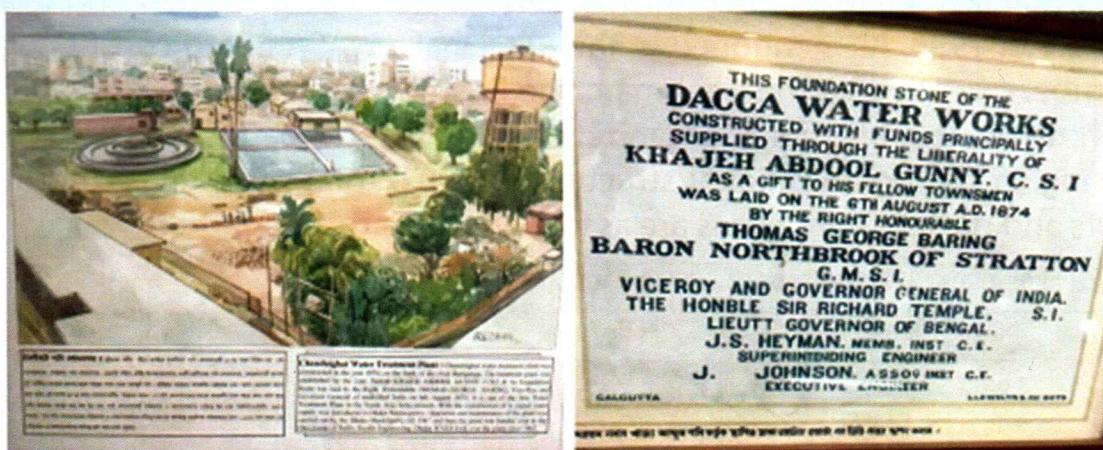
Contents

SL No.		Page No
1	Introducing Dhaka WASA	05
2	Dhaka WASA at a Glance	07
3	Dhaka WASA Board	10
4	Organogram of WASA	12
5	Activities of Dhaka WASA	13
6	A New Horizon in Water Supply: DMA	15
7	Water Quality Control and Monitoring	20
8	Geographical Information System (GIS)	22
9	DWASA holds 129 foreign, local and in-house training courses 2020-2021	25
10	Research, Planning and Development	27
11	Audit Report for 2019-2020	33
12	DWASA Turnaround 2019_2021	37
13	Low Income Community Program	38
14	Citizen Charter	39
15	DWASA Photo Gallery, 2020-2021	40

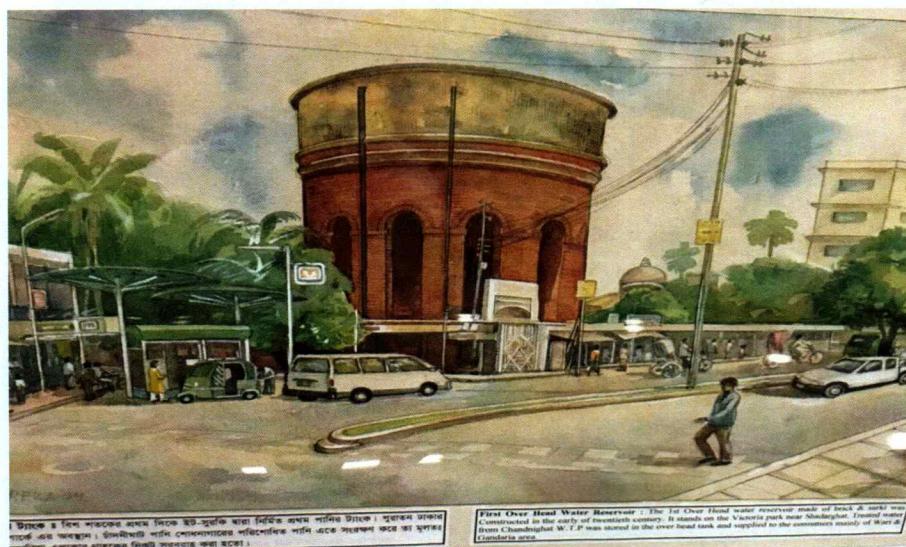
Introducing Dhaka WASA

Dhaka Water Supply and Sewerage Authority (WASA) is a service oriented autonomous commercial organization in the Public Sector, entrusted with the responsibility of providing water supply, sewerage disposal (wastewater), and storm water drainage service to the urban dwellers of Dhaka City. It covers more than 360 sq. km service area with more than 20 million people with a production capacity of 265 million liters water per day (MLD).

Dhaka WASA was established in the year 1963 as an independent organization and currently which is running under the WASA ACT 1996.



The First Water Treatment Plant in Dhaka City Established in 1874 - Chadnighat -WTP



The first overhead water reservoir made of brick and surki constructed in the early of 20th century

Area of Jurisdiction

Till June, 1989, the jurisdiction of Dhaka WASA was limited only to Dhaka metropolitan area. Later on, Dhaka WASA had the responsibility for supplying water and operating sewerage system of Narayanganj city in early 1990. At present, mega city Dhaka and Narayanganj are identified as Dhaka WASA service area. For easy operation, maintenance and providing better public service, Dhaka WASA service areas have been divided into 11 geographical zones. Among those, 10 zones are within Dhaka city and one in Narayanganj city. Technical operation, maintenance and collection of revenue bills, and other related activities are managed by the zonal offices.

Organizational Structure

The organizational structure of Dhaka WASA was changed according to the WASA Act 1996. As mentioned in the Act, Dhaka WASA Board consists of 13 members, headed by the Chairman. The Board is formed by representatives from different professional organizations and Government officials. According to the organizational structure of 2007, total number of approved posts and present employees are as follows:

Class	Approved Posts	Existing Posts	Vacant Posts
First	309	221	88
Second	331	260	71
Third	1917	1079	838
Fourth	2111	1340	771
Total	4668	2900	1768

Though it shows above that there exist some vacant posts, however in near future it would not be required as Dhaka WASA is going to digitise all of its activities and also shifting its focus to surface water source which will significantly reduce manpowers.

Dhaka WASA at a Glance

Water Supply

Item	Unit	2017-2018	2018-2019	2019-2020	2020-2021
Deep Tube well	Nr	795	827	887	896
Water Treatment Plant	Nr	4	4	4	5
Water Production/day	MLD	2450	2500	2550	2560
Water Line	Km	3600	3720	3750	3870
Water Connection	Nr	3,71,766	3,79,686	390642	392400
Overhead Tank	Nr	38	38	38	38
Street Hydrant	Nr	1643	1643	1643	1643

Sewerage

Item	Unit	2017-2018	2018-2019	2019-2020	2020-2021
Sewer Line	Km	930	934	934	934
Sewer Lift Station	Nr	26	26	26	26
Sewage Treatment Plant	Nr	1	1	1	1

Water and Sewerage Billing and Collection (In million Taka)

	2017-2018 (In lack taka)	2018-2019 (In lack taka)	2019-2020 (In lack taka)	2020-2021 (In lack taka)
Billing	105285.95	1191110.47	13062	13679.20
Collection	100055.82	117942.50	13067	12813.06
Bill Receivable (Dues)	44711.09	45881.06	4584	7661.46
Equivalent dues Billing (monthly)	5.46	4.96	4.46	5.46

Water Tariff

(in Taka)

Category	01/7/2016 to 31/10/2017	01/11/2017 to 31/07/2018	01/8/2018 to 30/06/2019	01/7/2019 to 30/06/2020	01/7/2020 to 30/06/2021
Domestic	8.49	10.00	10.50	11.02	14.46
Commercial	28.28	32.00	33.60	35.28	40.00
Industrial	28.28	32.00	33.60	35.28	40.00
Community	8.49	10.00	10.50	11.02	14.46
Government	28.28	32.00	33.60	35.28	40.00

Development Projects

	2017-2018	2018-2019	2019-2020	2020 -2021
Water Supply	5	5	7	6
Sewerage	1	1	1	2
Drainage	1	2	2	2
Technical Assistance Project	2	2	1	1
Total	9	10	11	11

Demand and Supply of Water by Dhaka WASA

Year	Population (In million - approximately)	Water Demand (Million Liter)	Water Supply Capacity (Million Liter)	Shortage (Million Liter)	No. of Deep Tube wells
1963	0.85	150	130	20	30
1970	1.46	260	180	80	47
1980	3.03	550	300	250	87
1990	5.56	1000	510	490	216
1996	7.55	1300	810	490	216
1997	8.0	1350	870	480	225
1998	8.5	1400	930	470	237
1999	9.0	1440	1070	370	277
2000	9.5	1500	1130	370	308
2001	10.0	1600	1220	380	336
2002	10.50	1680	1300	380	379
2003	11.02	1760	1360	400	391
2004	11.56	1850	1400	450	402
2005	12.15	1940	1460	480	418
2006	12.65	1900	1540	460	441
2007	13.15	1980	1660	320	465
2008	13.65	2050	1760	290	490
2009	14.15	2120	1880	240	519
2010	14.50	2180	1990	190	560
2011	15.00	2240	2150	90	599
2012	15.00	2240	2180	60	615
2013	15.00	2250	2420	-	644
2014	15.00	2250	2420	-	672
2015	15.80	2250-2300	2420	-	702
2016	16.00	2400	2450	-	795
2017	17.00	2450	2500	-	827
2018	20.00	2500	2550	-	887
2019	20.10	2500	2600	-	896
2021	20.10	2520	2740	-	923

Corporate Directory Dhaka WASA Board



Dr. Engr. Golam Mostafa
Chairman of Dhaka WASA Board

Members



Muhammad Ibrahim
Member of Dhaka WASA Board



Selina Akhter
Member of Dhaka WASA Board



Mr. Imran Ahmed
Member of Dhaka WASA Board



Mr. Sabbir Ahamed
Member of Dhaka WASA Board



Shaban Mahmood
Member of Dhaka WASA Board



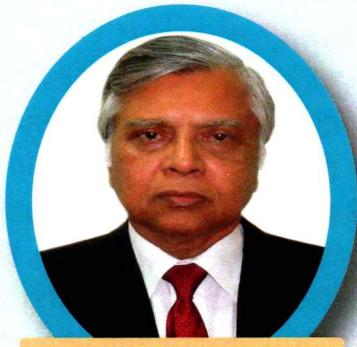
Dr. Mostafa Jalal Mohiuddin
Member of Dhaka WASA Board



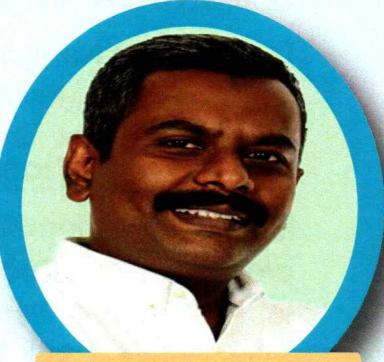
Professor Dr. Sujit Kumar Bala
Member of Dhaka WASA Board



Adv.Kazi Md.Nazibullah Hiru
Member of Dhaka WASA Board



A K M A Hamid
Member of Dhaka WASA Board



Kha.Ma. Mamun Rashid Shuvro
Member of Dhaka WASA Board



Shikha Chakroborty
Member of Dhaka WASA Board



Engr. Taqsem A Khan
Managing Director, Dhaka Wasa
&
Member of Dhaka WASA Board

Activities of Dhaka WASA

Dhaka WASA, as a service oriented autonomous commercial organization in public sector, is functioning through 4 wings that include Administration, Finance, Operation & Maintenance, and Research, Planning & Development. For better operation, maintenance, and customer care, the total service area of Dhaka WASA is divided into 11 geographic zones, which includes 10 in Dhaka City and 1 in Narayangang town.

Water Production

During the period 2020-2021, Dhaka WASA has achieved the capacity of daily production of 2650 million liter water per day (MLD) by using 887 deep tubewells and 4 Water Treatment Plants including Saidabad Water Treatment Plant Phase- I & II. The surplus water production capacity is a milestone in the history of Dhaka WASA.

Water Supply System

Mostly, water supply system of Dhaka WASA is dependent on ground water. Around 78 per cent water comes from underground sources and the rest 22 per cent from surface water. Ground water is abstracted by using a total of 887 deep tubewells. Surface water is supplied by treating water of the river Shitalakshya and Buriganga through 4 Water Treatment Plants.

Dhaka WASA supplies water to the mega city of Dhaka city and Narayanganj area. At present over 20 million people live in Dhaka and Narayanganj and this will increase many times by the year 2021.

It is notable that ground water level is declining by 2-3 meters per year due to continuous abstraction of water. For this reason Dhaka WASA, with the support & cordial cooperation of the present government, has pointed out the importance of reducing dependency on ground water by supplying water from surface water body as an alternative and sustainable source of water. For that purpose Dhaka WASA is moving towards environment-friendly, sustainable and pro-people water supply management system. Several water treatment plants projects have already been taken with a view to increasing dependency on surface water up to 70 percent.

To fulfill this target, saidabad Water Treatment Plant, Phase-III is under implementation, which will supply a total of 450 million liters water per day in the city. Furthermore, two additional large Water Treatment Plants at Gandharbpur and Padma (Josholdia WTP) Water Treatment Plant, (Phase-I) have been taken. In Gandharbapur, it is planned to treat water from the river Meghna, which will produce 500 million liter of water per day. The Padma Water Treatment Plant is beeing built at Josholdia near the bank of th great river Padma from where 450-million-liter treated water will be supplied for Dhaka city dwellers

Dhaka WASA has 410 (including 42 mobile generators) diesel-driven generators which help maintaining the abstraction of ground water during the interruption of power supplies. Particularly during the summer season water demand as well as the electricity rise to its peak. At that period water supply system in Dhaka city is kept under normal condition by abstracting water with the help of these generators. Dhaka WASA has taken initiatives for purchasing two hundred new generators which is under process. Moreover, if there is any water crisis anywhere in the city, Dhaka WASA instantly supplies water by using 43 water carriers and 44 trolleys.

Sewerage System

An effective sewerage system is a must for a healthy city. The sewerage system of Dhaka city was initiated in 1923. For a better and well-planned sewerage system in Dhaka city,a sewerage Master Plan has been undertaken and at least four sewage treatment plants will be constructed around the capital city. One of them is Dasherkandhi Sewage Treatment Plant, which is already under implemetion and the rest are (in Uttara, Mirpur, Rayerbazar) will be implemented one by one in the futre.

Summary of the existing Sewerage System is as follows:

■ Number of Sewage Treatment Plant	-	1
■ Number of Sewage Lift Station	-	26
■ Sewer Line	-	934 km
■ Number of Sewer Connection	-	88,980

A new horizon in Water Supply in South Asia Region:

District Metered Area (DMA) Approach and Non-Revenue Water (NRW) Reduction in DWASA:

Dhaka WASA has already started establishing DMA concept which is new and Innovative in the South Asia Region. Dhaka WASA has been providing dedicated service for safe water to the city dwellers.

The first water treatment plant was established by Nawab Khaza Abdul Ghani in Chandni ghat named “Dhaka Water Works” in the year 1874. Which is also the 1st water treatment plant in South Asia. From then the piped water supply was started in Dhaka city.

Almost 144 years ago these pipe lines was constructed and became leaky causing 40-45% of non-revenue water. Due to this leakage the water demand of city dwellers cannot be fulfilled and on the other hand Dhaka water supply & sewerage authority (DWASA) are not getting the revenue also. For example if the water production is 3.0 crore liter (which can fulfill the water demand of 200,000 people) per day but due to leakage 1.35 crore liter (which fulfill the water of 90,000 people) water is unaccounted for and only 1.65 crore liter (which fulfill the demand of 1,10,000 people) can be supplied to the households. So, producing 3.0 crore liter water for 2,00,000 people per day only 110,000 peoples are served. Due to this unaccounted-for water it become difficult to supply water to the people causing water crisis and this become serious especially in hot season.

The situation has become challenging to meet the rapidly increasing water demand in parallel to the rapid urbanization & development of Mega City, Dhaka. With course of time Dhaka WASA water supply system was moving towards unsustainable and unmanageable state due to inadequate system water pressure, use of suction pump, plenty of unidentified leakages and illegal connections, poor water quality, high system loss 40% -45%.

So, it is clear that water supply system cannot be improved unless and until the Non-Revenue Water (NRW) can be reduced.

For this purpose, a pilot project was initiated in 2007 under a TA project by Asian Development Bank (ADB) in Manikdi area of the city where NRW was 45%. Under the project 7 km water line was rehabilitated and 500 nos. of house connection was shifted from old water line to new one. After commissioning it was observed that the NRW became 12%. The consultant found similar circumstances across the system and concluded the network needs rehabilitation to prevent significance loss of water.

To cope up the challenge to ensure safe water for the city dwellers with customer's satisfaction in terms of water quantity, quality, system pressure; technically sustainable,

economically viable approach introduced through DWSSDP in 2011. Dhaka WASA implemented the DWSSDP with financial assistance full for from ADB & GoB.

The project aims to ensure sustainable, more reliable and improved water supply services through strengthening distribution networks and capacity building for better operation & management of the network by introducing of District Metering Areas (DMAs) to ensure 24/7 pressurized water supply in the network at 1-bar or more, to reduce the water loss to 15% or less, and Improve Water Quality. District Metered Area (DMA) is a technical term to define a hydraulically isolated small area from big network system with its own water supply system and distribution network for a community which can be isolated from remaining network without affecting supply system of other areas but with facilitating surplus water to adjacent water deficit areas. Dhaka WASA started establishing DMAs in 7- Zones, with a target of about 145 DMAs. So far established 54 DMAs and remaining 91 DMAs are in progressing. The amazing achievement of established DMAs is becoming a great focus to the customer and Dhaka WASA management.

What is DMA:

- DMA is a hydraulically isolated area.
- Interconnectivity with adjacent DMAs with provision of export or import facilities through DMA chamber.
- Conjunctive use of ground water & Surface Water.
- Controlling and monitoring water balance.
- Maintain pressurized system for 24/7 water supply
- Minimum NRW.

Criteria for selection of the DMA boundaries are:

- Selection of area for establishment a DMA
- At least one or more DTW with in the DMA
- Surveyed and Model designed for selected DMA
- Rehabilitate the existing whole network by HDPE pipe.
- Upgrade the pumping station.
- All illegal house connection must legalized.

Under Dhaka Water Supply sector Development Project (DWSSDP) a total of 47 nos. of DMA was established in 6 MODS Zone of D'WASA. In the project total 2456 km of water line was rehabilitated and 1,06,662 numbers of house connection was shifted. The average NRW became 5% and 5.4 million people are getting benefit from the project.

Achievements of DMA establishment are:

- ⇒ Pressurized water supply for 24/7.
- ⇒ All illegal house connections are legalized.
- ⇒ Average Water loss (NRW) became 5%.
- ⇒ Assured portable water.
- ⇒ No further use of suction pump.
- ⇒ Reduced electricity cost of consumers & D'WASA.
- ⇒ Decreased health cost.
- ⇒ Increased of DWASA Revenue.
- ⇒ Water Supply provided in LIC/Slum Area.
- ⇒ Easy operation & maintenance.

The achievement not only benefited to Dhaka WASA only, it is now becoming an icon in the South Asia Region. Thus, the high-level delegation from India and Srilanka team visited the DMAs to share knowledge and experience to introduce the innovative concept to their water supply system. Both the teams highly appreciated the lessons they learned from the experience of DWASA and they planned to replicate the DWASA's successful experience in their countries.

The ADB mission in September 2015 noted that Dhaka is the first City in South Asia to have achieved such high level of performance in NRW reduction and 24/7 water supply and has become a role Model for other cities in the South Asia.

Dhaka WASA expressed that next challenge would be to sustain DMA Management in order to keep low NRW.

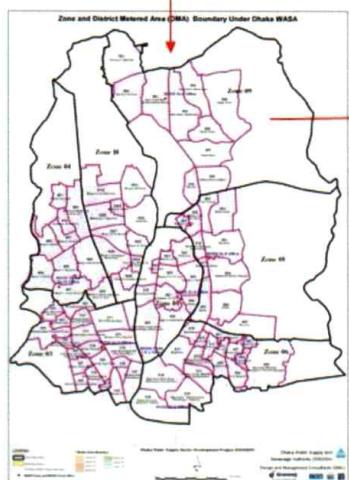
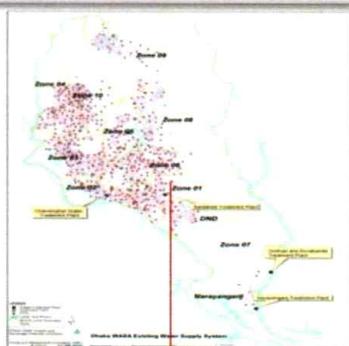
- Pressure balancing in the water supply distribution network - A properly designed water supply network demands a hydraulically balanced system to have reasonably uniform pressure over the entire command area of the network. This will ensure even distribution of flow to all the consumers. Present water supply distribution network lacks in this aspect. With several areas having very low pressure in the pipeline, while certain areas experience high water pressure. Consequently, flow available to the consumers is not uniform. Installation of electronically controlled pressure control devices (pressure reducing valves/pressure sustaining valves etc.) at strategic locations will improve upon the pressure distribution in the network and in turn will improve functional efficiency of the system.
- Providing continuous (24/7) water supply -Wherever water supply is not continuous, consumers tend to hoard water an apprehension of delay in next supply. During next time of supply, they discard the old water hoard fresh water once again. Consequently, in case of intermittent supply, water loss is much higher.
DWASA has planned to undertake the project of converting present practice of intermittent water supply system to continuous pressurized 24/7 water supply system for the entire city.

- **Use of energy efficiency pumping machineries-** this will ensure reduced power consumption at different locations; in turn will reduce the recurring operational cost.
- **Water quality monitoring-**DWASA's long term goal is to monitor and network water quality in real-time, so as to detect contamination early and control its spread to minimize impact to customers. There is a need to move away from depending on customers to act as sensors for water quality issues like discolored water, bad smell, presence of sediments, taste etc. Furthermore, in today's volatile social-political climate, we need to be even more vigilant to deter and prevent acts of sabotage that may threaten the quality of the water supply. As a part of water quality management, DWASA plans to enhance chlorination system, regular water quality monitoring, implementation water safely plans, water quality safeguard etc.

Another technical innovative approach introduced is the Trench Less Technology, which brings the tremendous quick pipe installation progress with minimum disturbance to the city dwellers & traffic and reduced cost for road cutting, damage & restoration. It added a dimension & technical viability of pipe installation in busy city like Dhaka. When all Zones of Dhaka WASA will come under DMA system it will be a great achievement in terms of technical sustainability, customer's satisfaction, economically viable water supply system. In the course of time sustainable DMA Management capacity of Dhaka WASA will be enhanced to run the system smoothly.

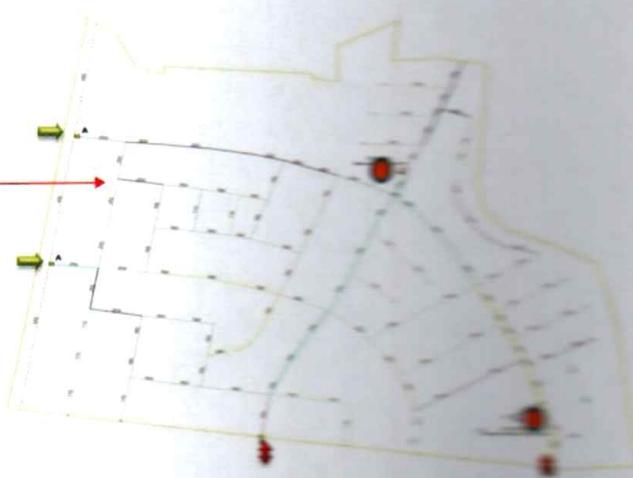
The DMA approach not only facilitates Unaccounted for Water (UFW), but also helps in maintaining assets for longer duration and enables better pressure management, better water quality and continuous water supply. DMA Managers, Deputy Managers and Licensed plumbers has already deployed for individual DMAs for installations of fresh connections, carrying out necessary repairs also will be responsible for any illegal connections in the area to keep the DMA sustainable

DMA Concept



Water Sources:

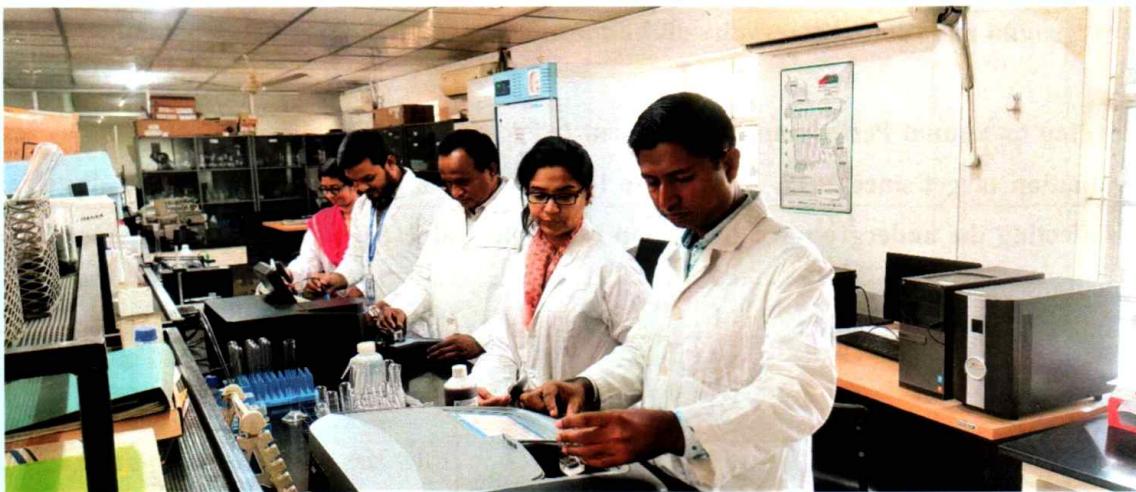
- Groundwater
- Surface-water
- Inter-DMA



Water Quality Analyses and Monitoring in Dhaka WASA Central Laboratory

The Dhaka Water Supply and Sewerage Authority (DWASA) provides safe and quality assured water to the city dwellers. The supply of potable water by Dhaka WASA coming from ground and surface water sources is tested regularly in the laboratory of Microbiology and Chemical Division (DWASA Central Laboratory). The standard of supplied water of DWASA meets the requirement of Bangladesh standards (ECR-1997) and World Health Organization (WHO) Guide Line Values (2011). There is a chlorination system at the sources to kill/and or inactivate waterborne pathogens including removal of some pollutions in the water. In case of surface water treatment, chlorination is used at pre-treatment stages and also at the delivery points to ensure that it reaches to the customer's point in a safe condition.

Many physico-chemical and bacteriological water quality parameters (about 45 parameters) are conducted in DWASA Central Laboratory to assured drinkability of supplied water. Bacteriological parameters such as Total coliforms, Feecal coliform, Total plate count are analyzed regularly to trace out the microbial contamination in supplied water. Different types of physico-chemical water quality parameters such as pH, Turbidity, TDS, Conductivity, Residual Chlorine, Ammonia, Nitrate, Phosphate, Sulphate, Fluoride, Chloride, Hardness, BOD, COD, Aluminium and also some important types of heavy metals like Arsenic, Chromium, Cadmium, Lead, Zinc, Copper, Iron, Manganese are analyzed regularly using UV-Visible Spectrophotometer , Atomic Absorption Spectrophotometer etc. These water quality parameters are tested for deep tube well water as well as for surface water and many others are also analyzed according to the requirements. In addition, the river water that is in the water treatment plant is tested at monthly basis.



* Water quality is analyzing in laboratory room using different lab equipment.



*Hand Sanitizer (Nirapod Hat) prepared by Dhaka WASA Central Laboratory.

To examine the quality of the supplied water, samples are taken regularly at the sources and from the distribution mains, as well as from consumer reservoirs and then these water samples are tested in the DWASA Central Laboratory. If there is anomaly, necessary steps are taken as soon as possible by the concerned divisions to rectify the situation. Normally the source and distribution mains are free of contamination but in many cases the presence of harmful bacteria is observed in the underground and rooftop reservoirs of the consumers.

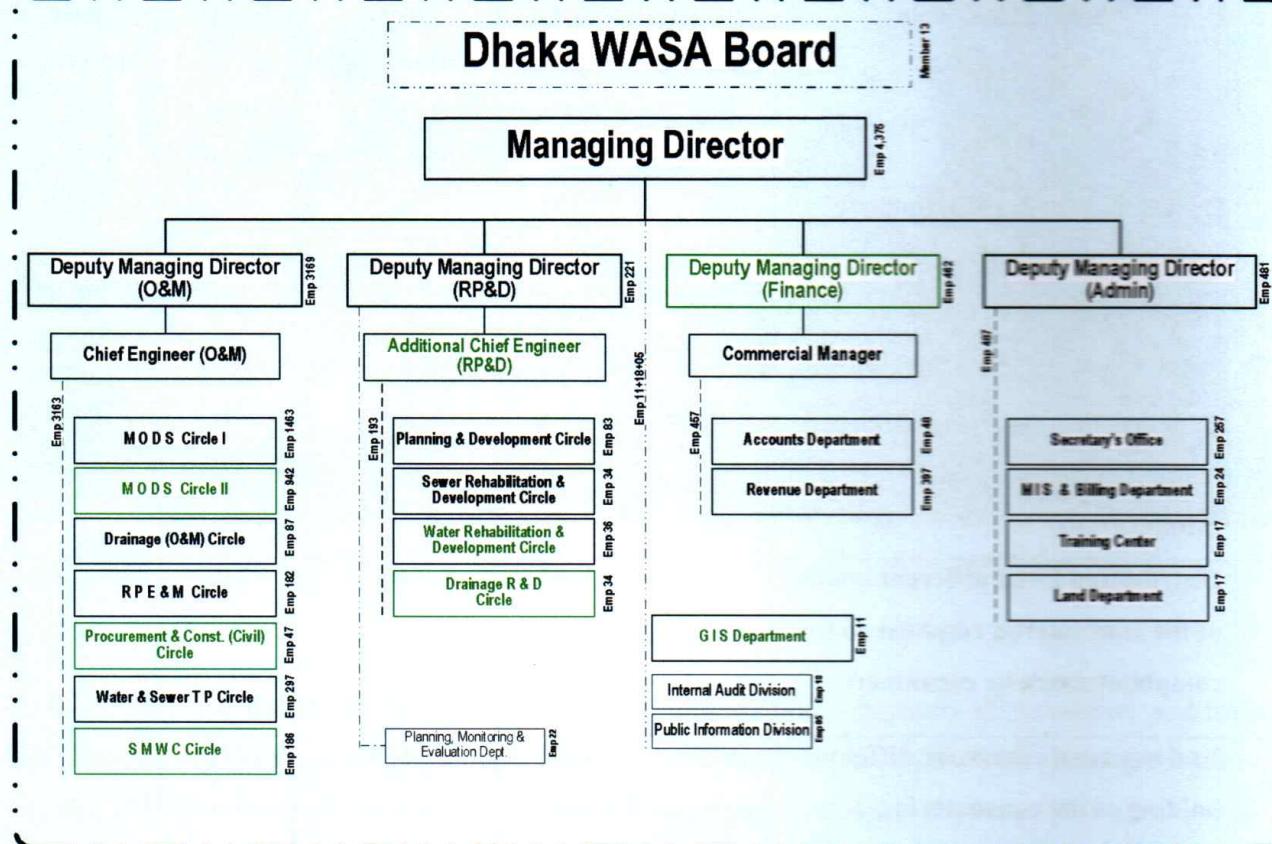
According to Annual Performance Agreement (APA) we are achieving the water quality testing and evaluation target since 2017. In order to increase public awareness for hygienically cleaning and disinfecting the underground and rooftop reservoirs, advertisements are broadcasted through mass media.

Description of different tests of water samples in the fiscal year 2020-2021

Physico-Chemical and Bacteriological Analysis

SL. No.	Source Of Sample	No. Of Samples	No. Of Physico- Chemical Tests	No. Of Bacteriological Tests	No. Of Residual Chlorine Tests	No. Of Analytical Tests
১	Deep Tube Wells (Monitoring)	756	2394	369	81	---
২	Distribution line at different holding of the consumers (Monitoring)	1292	2588	1290	646	---
৩	Underground reservoir at different holding of the consumers (Monitoring)	1358	2778	1357	679	---
৪	Distribution line at different holding of the consumer(in response to the complaints made by consumer)	426	1485	305	210	---
৫	Underground reservoir at different holding of the consumer(in response to the complaints made by consumer)	473	1638	373	235	---
৬	Dhaka, Sonakanda and Godnail Water Works/Podmajooldia	28	200	84	14	---
৭	Bangabhaban and WASA bhaban	322	1150	397	160	---
৮	Deep Aquifers/Replaced Tube Wells	110	1787	184	---	---
৯	Bottle Plant (Shanti)Vakorta project	266	884	140	14	---
১০	Honorable PM's Office Related Pump	144	206	36	22	---
১১	Water Sample/Chemical Tests with	43	407	40	---	---

Organogram of Dhaka WASA



Geographical Information System (GIS)

Actual GIS activity started from April'2011. Following functions were implemented:

DMA and Water Network: A district metered area (DMA) is defined as a discrete area of a water distribution network. It is usually created by closing boundary valves so that it remains flexible to changing demands. However, a DMA can also be created by permanently disconnecting pipes to neighboring areas. Dhaka WASA has already planning to build about 144 DMA using GIS tools.

Water, Sewer and Drainage Networking Mapping: Many have characterized Geographic Information Systems (GIS) as one of the most powerful of all information technologies because it focuses on integrating knowledge from multiple sources and creates a crosscutting environment for collaboration. GIS is a system for the management, analysis, and display of geographic knowledge, which is represented using a series of information sets. In the present study, GIS will be used to organize the data for usage in water distribution networks design, and analysis. In addition, GIS is used as a tool for number of created applications for network management; such as identifying valves to be closed in case of pipe break, service area for treatment plants, and network skeletonization. Finally, GIS is used to provide graphical display of results obtained from both hydraulic simulation, and optimization models; linking tabular data with geographic locations, and graphical drawing.

Deep tube well mapping: Deep tube well is the only source of underground water which distributed to city dwellers. The Deep tube well position with information has been built in GIS. Using these data, can help to provide comments before installation of new Deep Tube wells both DWASA and private owned.

Land Mapping: To proper management of WASA land, Land has been converted to digital using GIS tools.

Surface Water Transmission line Mapping: Dhaka WASA has four water treatment plant. Under those surface water treatment plants, all transmission line has been converted in digital format using GIS tools.

Base line Mapping: Baseline thematic mapping involves the compilation of varied data sources, ranging from satellite imagery to detailed information to planimetric data from the 1:250,000 National Topographic database. Base map sheets overlain by various combinations of thematic data are produced with an aim toward resource management applications. Baseline thematic mapping incorporates not only interpretations of ground cover data but topographic information such as elevation contours and planimetry to provide an optimal tool for resource management. This information may be portrayed in traditional map format, or as an image-map, which is an excellent means of presenting spatial data to resource managers and many other users. Dhaka WASA has built road, water body, house position, bridge, culvert and also other utilities network.

House Connection mapping: Dhaka WASA has been determined to be with Digital Bangladesh and progressing to step by step development to achieve the Goal. In this Stage, DWASA has taken initiative to make Smart Metering. GIS mapping for House Connection can be the first step to turn smart metering.

Valve mapping: Valve point are using to proper maintenance for water service area. So it's very important to know the location and related information of Valve. Mapping of Valve position has been built in GIS including information to provide Better operation and maintenance. Flow control, pressure sustaining and reducing valve are using in DMA management.

Bulk Meter mapping: Bulk meter are using to estimate inflow/ import and outflow/export into adjacent DMA areas for calculation of water loss. So it's very important to know the location and related information of Bulk meter. Mapping of bulk position has been built in GIS.

Digital elevation modelling (DEM):

Ground elevation is the important component for water, sewer and drainage network Design. Ground elevation is extracting using stereo image and ground control point (GCP) from Remote sensing technology. Mapping of ground level has been built in GIS.

LIC Mapping: As a part of the plan to bring all slum areas in Dhaka and Narayanganj city under water distribution service, prepare GIS database for LICs – and already implemented to Kuril at Zone 5 and Jilmara at Zone 4 covering about 20,000 and 2554 households respectively.

Piloting Zonal Mapping: Completed a few maps as a pilot work viz. (1) water pipe line (2) service connection (3) building structure (4) mouza (5) zonal boundaries (6) water bodies etc. Billing information is being joined with these maps; as a result of which is possible to find out connection status, non-metered household, connection type etc. for better understanding of physical features of service areas.

A few works have been done:

- Scan and digitize of about 1200 system maps on Water, Sewer and Drainage line.
- Upload of all types of maps to DWASA website.
- GPS survey Based mobile apps for water, sewer and drainage network.

Plans are underway to:

- Develop GIS Based on Web Platform for Dhaka WASA.
- Integrate whole billing system with GIS.
- Integrate SCADA system with GIS.

DWASA holds 119 foreign, local and in-house training courses during 1 July 2020 to 30 June 2021

A total of 119 courses both home and abroad were conducted during 1 July 2020 to 30 June 2021. Of them six foreign, fourteen local and ninety nine in-house training courses were facilitated to the officials and staff of Dhaka WASA. The foreign courses attended by 22 officers from Dhaka WASA included Masters of Engineering (Civil and Environmental Engineering) at The University of Western Ontario, Canada; Masters of Engineering (Environmental Systems Engineering) at The University of Regina, Canada; Geo-information Science and Earth Observation course at The University of Twente, Netherlands MSc. in Civil Engineering at The University of Texax, Arlington, USA; Water Loss Management in the Distribution System, IHE, Delft, Netherlands (Online); 4th Webinar "Water-Energy-Food-Nexus", The Asia Water Council (Online)

The local training courses were WOP2 Webinar: NRW strategy in Vietnam, WOP2 Webinar on step testing, Water Safety Plan (with short introduction on Zero Pressure Test), Using Change Management Principles to Reduce NRW, How to use Benchmarking to get better O&M, SCADA Reporting Analysis, Water Meters, Pressure Reduction Valves (PRV) and Data logging, Certificate Course on Core Python, Basic Procurement Training (3-weeks), Project Planning and Management, 57th Senior Security Course/2021, Training on Capability Enhancement on Innovation

Workshop on Essential Quality Assured Data and Information for Integrated Urban Water Management Numbers of participants for the local training courses were 426.

The rest of the in-house training programs are Basics of FIDIC Documents, Behavioral Project Management, Departmental Proceeding and Preparation of Inquiry Report (2 courses), Departmental Proceeding and Preparation of Inquiry Report (2 courses), Design, Operation and Maintenance of STP (8 courses), Drilling and Well Construction (2 courses) Emotional Intelligence-b a self-motivator (3 courses), E-nothi office management (5 courses), Environmental Safeguard Estimating and Construction of Water Line using HDPE Pipes (2 courses), Financial management for non-financial executives, Gender Mainstreaming, Innovation Training on Service Process Simplification (2 courses), Internal Audit (2 courses), Land Acquisition and Resettlement, Leadership Development for the 21st Century (3 courses), Orientation Course, Preparation of Income Tax Returns (5 courses), Project Economical Management, Refreshers Training on DMA Commissioning by WOP2, Refreshers Training on DMA Caretaker Approach, Refreshers Training on Introduction to NRW and DMA Management, Refreshers Training on SCADA by WOP2, Revenue Billing Collection and Customer Care (6 courses), Sewerage System Planning Consideration and Hydraulic Modeling for Sewer System Analysis , Social -

Development and Gender Balance, Stress Management, Technique of Revenue Target Fixation and Individual Target Distribution to Revenue Personnel of DWASA (5 courses), Training for DTW Pump Operators in Water Quality Testing for RC (2 courses), Training on 1st Tire Water Quality monitoring (2 courses), Training on Annual Performance Agreement (APA) (14 courses), Training on GIS, Training on Hydraulic Modeling Using EPANET Software (3 courses), Training on Meter Reading (3 courses), Urban Water Supply Management System (For Officers and Staff of Sylhet City Corporation), Water Loss Management in the Distribution System (6 courses), Workshop on Development of Financial Model for Dhaka WASA, Workshop on NIS (5 courses), Workshop on Strategic Procurement Plan. 2456 officers and staffs of DWASA participated in in-house training programs.

Summary of Training (July 2020-June 2021)				
	No of Courses	No of Participants		
		Officer	Staff	total
In-house	99	2013	443	2456
Local	14	426	-	426
Foreign	06	22	-	22
Total	119	2461	443	2904

**Wing : Research, Planning & Development
Division : Planning, Monitoring & Evaluation Division**

Dhaka WASA

Annual Report for The FY 2020-21

Dhaka WASA was formed as an autonomous organization in 1996 with the enactment of the WASA Act and responsible for providing vital services such as water supply and sewerage management in the Dhaka metropolis. At present, Dhaka WASA is providing safe water for daily use to about 1.75 crore residents of Dhaka metropolis. Dhaka WASA has achieved the capacity to produce 250-260 crore liters of water against the daily demand of 240-250 crore liters. The goal of Dhaka WASA is to improve the quality of life of the people by ensuring hundred percent water supply and sewerage facilities for the city dwellers.

Dhaka WASA has undertaken environment-friendly, sustainable and pro-people water management activities by increasing public participation through the guidance and cooperation of Hon'ble Prime Minister Sheikh Hasina. In addition, Dhaka WASA is working to improve water supply and sewerage systems to achieve the Sustainable Development Goals (SDG) 6.1 and 6.3 by 2030.

As per the Eighth Five Year Plan, WASA has been formulating plans to make steady progress in the development and maintenance of water supply and sewerage system in the Dhaka City.

To ensure safe, sufficient, affordable and reliable water and sanitation services formulated three Master Plans namely:

- i) Water Master Plan
- ii) Sewerage Master Plan
- iii) Drainage Master Plan

In 2020-21 Financial Year, on the basis of the above-mentioned Master Plans and Turn around DWASA Program, it has implemented 10 development projects. Those projects were included in the Annual Development Program (ADP) in the said year. Among the said projects: 5 were investment projects for water supply and 3 projects for sewerage & Other 2 were Drainage Projects. Planning, Monitoring and Evaluation Division has been engaged exclusively to monitor and to evaluate those projects' performance which are as follows:

A. Development Projects of Dhaka WASA

1. Investment projects in Water Supply

I)	Name	:	Dhaka Environmentally Sustainable Water Supply Projects.
	Duration	:	October' 2013 to June' 2022
	Estimate Cost	:	815107.00 Lakh Taka
	Allocation	:	127100.00 Lakh Taka
	Release	:	129834.21 Lakh Taka
	Expenditure	:	108204.87 Lakh Taka
	Physical Progress	:	100.00%
	Financial Progress	:	85.26%
II)	Name	:	Saidabad Water Treatment Plant Project Phase-III
	Duration	:	July' 2015 to June ' 2021 Revised July,2015-June,2025(Proposed)
	Estimate Cost	:	459736.05 Lakh Taka
	Allocation	:	2963.00Lakh Taka
	Release	:	213.00 Lakh Taka
	Expenditure	:	38.00 Lakh Taka
	Physical Progress	:	40.00 %
	Financial Progress	:	1.28%
III)	Name	:	Dhaka Water Supply Network Improvement Project
	Duration	:	April' 2016 to December ' 2021
	Estimate Cost	:	318230.00 Lakh Taka
	Allocation	:	30119.00 Lakh Taka
	Release	:	22566.81 Lakh Taka
	Expenditure	:	22115.60 Lakh Taka
	Physical Progress	:	73.63%
	Financial Progress	:	73.43%

IV)	Name	Emergency Replacement works for water lines at different areas of Dhaka City project
	Duration	: January' 2020 to June' 2021
	Estimate Cost	: 4898.00 Lakh Taka
	Allocation	: 505.00 Lakh Taka
	Release	: 429.25.00 Lakh Taka
	Expenditure	: 402.12 Lakh Taka
	Physical Progress	: 99.00 %
	Financial Progress	: 93.67%
V)	Name	: Emergency Water Supply Project
	Duration	: January' 2020 to December' 2023
	Estimate Cost	: 73232.00Lakh Taka
	Allocation	: 12367.00 Lakh Taka
	Release	: 10867.00 Lakh Taka
	Expenditure	: 10867.00 Lakh Taka
	Physical Progress	: 102.00 %
	Financial Progress	: 87.87%

2. Investment Projects on Sewerage and Drainage System

I)	Name	: Dasherkandi Sewage Treatment Plant Project.
	Duration	: July' 2015 to 02 June' 2022
	Estimate Cost	: 371254.00 Lakh Taka
	Allocation	: 32210.00 Lakh Taka
	Release	: 31525.27 Lakh Taka
	Expenditure	: 31525.27 Lakh Taka
	Physical Progress	: 100 %
	Financial Progress	: 97.87 %

II)	Name	Land Acquisition and Excavation/ Re-excavation of Hazaribagh, BaishTeki, Kurmitola, Manda, & Begunbarhi Khal
	Duration	: 1 st April ' 2018 to 31 st December ' 2022 (1 st Revised)
	Estimate Cost	: 64551.32 Lakh Taka
	Allocation	: 3717.00 Lakh Taka
	Release	: 249250.00 Lakh Taka
	Expenditure	: 2064.3247 Lakh Taka
	Physical Progress	: 20.00%
	Financial Progress	: 55.54%
III)	Name	: Expansion of Drainage Network & Development of Canal in Dhaka City.
	Duration	: July' 2018 to December ' 2020
	Estimate Cost	: 55050.00 Lakh Taka
	Allocation	: 8000.00 Lakh Taka
	Release	: 8000.00 Lakh Taka
	Expenditure	: 5645.00 Lakh Taka
	Physical Progress	: 73.41.00 %
	Financial Progress	: 70.56%
IV)	Name	Land Acquisition for Construction of sewage Treatment Plant at Uttara.
	Duration	: July' 2019 to June ' 2021
	Estimate Cost	: 139800.00 Lakh Taka
	Allocation	: 13.00 Lakh Taka
	Release	: 11.05 Lakh Taka
	Expenditure	: 11.05 Lakh Taka
	Physical Progress	: 100.00 %
	Financial Progress	: 85.00%

V)	Name	:	Dhaka Sanitation Improvement Project
	Duration	:	January' 2020 to December' 2024
	Estimate Cost	:	385560.00 Lakh Taka
	Allocation	:	200.00 Lakh Taka
	Release	:	76.50 Lakh Taka
	Expenditure	:	130.32 Lakh Taka
	Physical Progress	:	95.00 %
	Financial Progress	:	74.46%

B. Financial Progress of those projects

In FY 2020 -21, total taka 2171.94 crore was allocated against those said projects in the Revised Annual Development Program (RADP). Taka 1033.32 crore was allocated from the own fund of the Government of Bangladesh (GOB) and tk. 1138.62 crore was sanctioned from the Development Partners (DP) ' fund as the Project Aid. In this said year, tk. 2060.15 crore has been released and tk. 1810.03 crore was incurred as expenditure. As a whole, the financial progress was 90% in that time.

C. Major Physical Progression of the said projects

Sl. no.	Name of the component	Progress
1.	Construction & rehabilitation of deep tube wells	: 97 no.
2.	Construction & rehabilitation of water lines	: 388.1 km.

In this time, the physical progression was 97% as a whole.

To achieve and to access the adequate and equitable water, sanitation and hygiene for all by the year 2030, which corresponds to the target of the SDG, Dhaka WASA has stepped to implement the following proposed projects

A. Newly Approved Projects in the said FY 2020-21:

Dhaka Sanitation Improvement Project.

This project will carry over the period

B. Proposed Project in the FY 2021-22:

1. Water Supply

I) Name : Strengthening of the existing Water Distribution system of Dhaka city to cope of the production of Padma Water Treatment Plant (Phase-I) at Jashaldia.

Duration : July' 2019 to June' 2021

Estimate Cost : 52310.00 Lakh Taka

II) Name : Development of Water Supply System for Extended Dhaka City.

Duration : July' 2021 to July' 2025

Estimate Cost : 150000.00 Lakh Taka

2. Sewerage and Drainage System

I) Name : Land Acquisition for construction of sewage treatment Plant at Rayerbazar

Duration : July' 2021 to June' 2024

Estimate Cost : 194200.00 Lakh Taka

Audit Report for 2019-2020

Dhaka Water Supply and Sewerage Authority

Opinion

We have audited the accompanying financial statements of Dhaka Water Supply and Sewerage Authority ('the DWASA/Authority') which comprise the statement of financial position as at 30 June 2020, the statement of profit or loss and other comprehensive income, statement of changes in equity, statement of cash flows for the year ended and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the DWASA as at 30 June 2020 and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) and comply with other applicable laws and regulations.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Authority in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (GESBA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Bangladesh, and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements and Internal Controls Management is responsible for the preparation of the financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRSs) and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

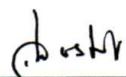
The engagement partner on the audit resulting in this independent auditor's report is Md. Enamul H. Choudhury.

Document Verification Code (DVC) is : 2101170471A5738286

Dhaka Water Supply and Sewerage Authority
 Statement of Profit or Loss and Other Comprehensive Income
 For the year ended 30 June 2020

	Notes	Amount in BDT	
		July 2019 to June 2020	July 2018 to June 2019
Service delivery earnings (Revenue)			
Water		10,233,778,330	9,728,919,526
Sewerage		3,417,972,280	3,333,517,690
		13,651,750,610	13,062,437,216
Other income	20	1,410,226,714	1,377,150,818
Total income (A)		15,061,977,324	14,439,588,034
Operating expenses			
Salary and wages	21	2,474,332,851	6,204,802,154
Repairs and maintenance	22	5,919,823,597	5,092,474,454
Administrative expenses	23	323,807,395	783,128,186
Depreciation	4	4,372,195,749	1,655,760,483
Amortization	5	20,656,221	10,185,582
Provision for bad and doubtful debts	8.1	43,129,415	18,540,472
Total operating expenses (B)		13,153,945,228	13,764,891,331
Operating profit (A-B)		1,908,032,096	674,696,703
Interest expense	24	1,289,608,907	142,954,960
Profit Before Tax		618,423,189	531,741,743
Income tax		154,605,797	132,972,936
Profit After Tax		463,817,392	398,768,807
Total comprehensive income for the period		463,817,392	398,768,807

The notes annexed 1 to 29 are an integrated part of these financial statements


 Chairman
 DWASA Board

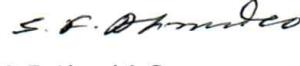

 Member
 DWASA Board


 Managing Director
 DWASA


 Director (Finance)
 DWASA

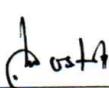
Dhaka,
 11 January 2021




 S. F. Ahmed & Co.
 Chartered Accountants

Dhaka Water Supply and Sewerage Authority
Statement of Financial Position
As at 30 June 2020

Notes	Amount in BDT	
	30 June 2020	30 June 2019
ASSETS		
Non-current assets		
Property, plant and equipment	4	84,277,143,883
Intangible assets	5	101,637,592
Capital work-in-progress	6	52,877,469,840
Total non-current assets		137,256,251,315
Current assets		
Materials and supplies	7	1,828,124,547
Service delivery earnings (SDE) receivables	8	7,647,197,909
Advances, deposits and prepayments	9.	1,033,967,509
Investments	10	2,983,407,970
Other receivables	11	81,153,926
Advance income tax	12	264,035,787
Cash and cash equivalents	13	3,594,796,901
Total current assets		17,432,684,549
Total assets		154,688,935,864
EQUITY AND LIABILITIES		
Capital and reserve		
Capital fund		1,540,252,387
Revaluation surplus		21,868,756,508
Contingency & reserve for self insurance		7,364,890
Retained earnings		8,168,851,026
Total equity		31,585,224,811
Non-current liabilities		
Grants and other funds	14	85,244,324,791
Deferred tax liability	15	5,137,818,597
Loans and borrowings	16	26,814,757,726
Total non-current liabilities		117,196,901,114
Current liabilities		
Loans and borrowings		3,000,000,000
Liabilities for expenses	17	892,651,671
Other liabilities	18	1,641,264,811
Provision for audit fee		860,000
Provision for government dividend		5,000,000
Provision for taxation	19	367,033,457
Total current liabilities		5,906,809,939
Total liabilities		123,103,711,053
Total equity and liabilities		154,688,935,864
<i>The notes annexed 1 to 29 are an integrated part of these financial statements</i>		


Chairman
DWASA Board


Member
DWASA Board


Managing Director
DWASA


Director (Finance)
DWASA

Dhaka,
11 January 2021




S. F. Ahmed & Co.
Chartered Accountants

DWASA Turnaround 2020-2021



D H A K A
Water Supply & Sewerage Authority
W A S A



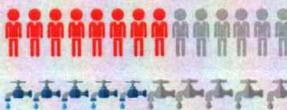
12 Years ACHIEVEMENTS
of “Dhaka WASA Turnaround Program”

YEAR
2019-2020

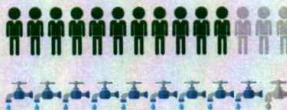
WATER SUPPLY



shortage



excess



2009 WATER DEMAND
360 sq. km service area with 12.5 million people with a DEMAND of almost 2120 million liters per day (MLD).

2009 WATER PRODUCTION
Water Production of Dhaka WASA was 1880 million liters per day (MLD).

2020 WATER DEMAND
For 18 million population, Present Daily Demand is 2500 million liters per day (MLD).

2020 WATER PRODUCTION
Water Production of Dhaka WASA is 2600 million liters per day (MLD).

SYSTEM LOSS





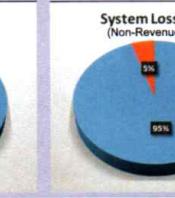
System Loss 2010
(Non-Revenue Water)

System Loss	40%
Non-Loss	60%



System Loss 2020
(Non-Revenue Water)

System Loss	20%
Non-Loss	80%

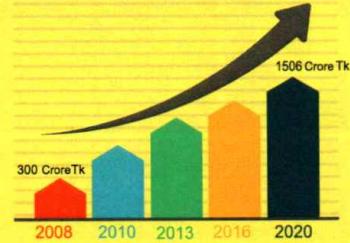


System Loss in DMA
(Non-Revenue Water)

System Loss	5%
Non-Loss	95%

REVENUE INCOME

In Financial Year 2007-2008, Dhaka WASA revenue income was about 300 Crore BDT, while Financial Year 2019-20 the revenue income has increased to 1506 Crore BDT.

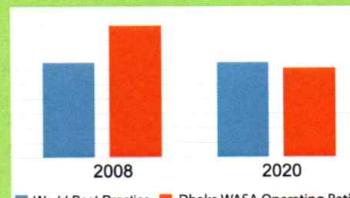



300 Crore Tk 1506 Crore Tk

2008 2010 2013 2016 2020

OPERATING RATIO

Before 2009, the Operating Ratio was 0.90. At Present, it has reduced to 0.62. To be noted that the World Best Practice is 0.65. Dhaka WASA exceeded the Best Practice in Operational Efficiency.



World Best Practice Dhaka WASA Operating Ratio





LOW INCOME COMMUNITY (LIC)

By December 2021, all Low Income Communities (LIC) of Dhaka City will be covered through legal water connection. Meanwhile, biggest LIC of Dhaka city named "Korail Bosti, Sattala Slum, Bhasantek Slum" have already been covered with legal water connection.



CAPACITY BUILDING

In 2009, there were shortfalls in supplying water as demand gradually increased. Taking this issues under consideration, Dhaka WASA took dynamic initiatives named "Dhaka WASA Turnaround Program in 2010". To Establish "Good Governance" this program has achieved that success.



ROLE MODEL

Development Partners like Asian Development Bank (ADB) have recognized Dhaka WASA as a "ROLE MODEL" to other developing countries of South Asia.



DIGITAL WASA

Dhaka WASA turned towards electronic system in Govt. Procurement, File Management, Water Dispenser (ATM) and Automation of all WASA activities.



e-PAYMENT SYSTEM

24/7 Paperless billing/e-Payment facility has been introduced through SMS/On-Line Support



WASA



FOREIGN INVESTMENT

In 2008, Foreign Investment in Dhaka WASA was almost 'Zero'. Whereas, in 2020 3.03 Billion USD have been invested in the water and sewage sector of Dhaka WASA.



SCADA & DMA

Last 12 years Dhaka WASA introduced SCADA and DMA for Smart Water Management



MEGA PROJECTS

Within intense monitoring the 3 mega water treatment plants- Padma (Jashaldia)-450 MLD, is under operation, and Saidabad phase- 3-450 MLD, Gandharbpur-500 MLD, Dasherkandi Sewage Treatment Plant Project and Dhaka Sanitation Improvement Project are under construction



Citizen Charter (15.11.2020)

http://www.dwasa.org.bd/site/view/citizen_charter

*An Efficient Call Center **Solution**
for better complaint & employee
management for Dhaka WASA*



WASA Link 16162

Digital Bangladesh, Digital WASA

DWASA Photo Gallery, 2020-2021



DWASA distributed food with Honorable minister of Ministry of Local Government, Rural Development and Co-operatives at Kollyanpur slum during COVID-19 period



Honorable Commercial Manager of DWASA visited hand washing station of DWASA UNICEF LIC COVID-19 WASH Support Projec-01



Picture of Customer Discussion Meeting of DWASA UNICEF LIC COVID-19 WASH Support Projec-01



Picture of MHM and Hand washing session of DWASA UNICEF LIC COVID-19 WASH Support Projec-03



Picture of MHM and Hand washing session of DWASA UNICEF LIC COVID-19 WASH Support Projec-03



Picture of new water point of DWASA UNICEF LIC COVID-19 WASH support project-03



WASA



VISION TO TURN AROUND
GO GREEN AND GO DIGITAL

