



**WASA**

**Dhaka Water Supply and  
Sewerage Authority**

**Annual Report  
2019-2020**



## Message

It is my pleasure to know that Dhaka Water Supply and Sewerage Authority (DWASA) is going to publish the Annual Report for 2019-2020 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.

A stylized, handwritten signature in black ink, appearing to read 'Taqsem A Khan'.

**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 truned into Environment Friendly, Sustainable and pro-people water management system. In achieving this 'change management policy, DWASA set its vision & 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 against the daily demand of 250-255 crore litres.
- The revenue income of DWASA has been increased from 3 billion taka to more than 13 billion taka in year 2019-2020.
- Implementation of 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 (NRW) has been reduced from 40% to 5%.
- Bringing low income Community (LIC) or slum dwellers under safe & legal water supply network.
- Introduction of 100 percent online billing system including payment through SMS as well.

### Milestone...

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

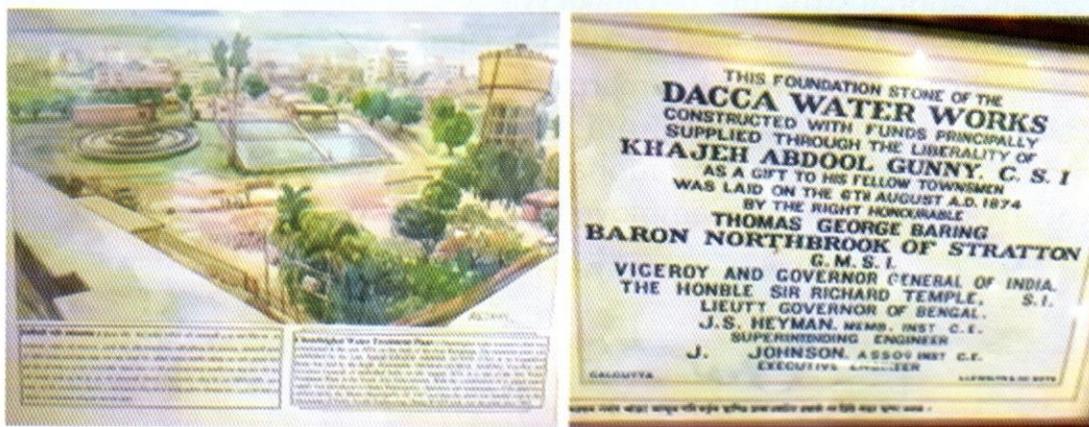
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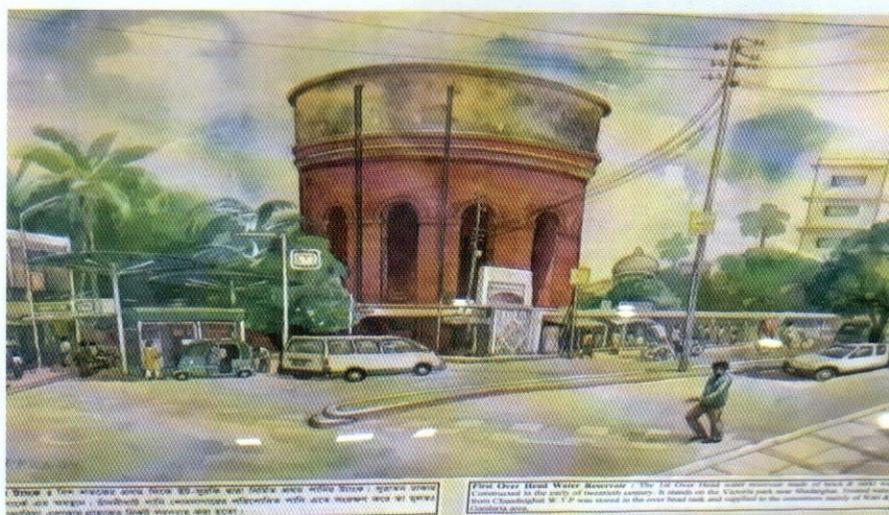
## Introducing Dhaka WASA

Dhaka Water Supply and Sewerage Authority (DWASA) 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 of 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 1963 as an independent organization and currently running under the 'WASA Act 1996'



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



The First Overhead Water Reservoir Made of Brick and Surki Constructed in the Eve of the 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, Dhaka Mega City and Narayanganj are identified as the service area of Dhaka WASA. For easy operation, maintenance and to ensure better public service, Dhaka WASA's service area have been divided into 11 geographical zones. Among those, 10 zones are within Dhaka city and one in Narayanganj city. Technical operation, maintenance, 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 Government officials and representatives from various professional organizations. 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	263	46
Second	330	268	62
Third	1917	1244	673
Fourth	2111	1351	760
<b>Total</b>	<b>4667</b>	<b>3126</b>	<b>1541</b>

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

## Dhaka WASA at a Glance

### Water Supply

Item	Unit	2016-2017	2017-2018	2018-19	2019-2020
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	2016-2017	2017-2018	2018-19	2019-2020
Sewer Line	Km	930	934	934	934
Sewer Lift Station	Nr	26	26	26	26
Sewage Treatment Plant	Nr	1	1	1	1

### Drainage

Item	Unit	2016-2017	2017-2018	2018-19	2019-2020
Storm Sewer Line	Km	350	370	380	385
Open Canal	Km	74	78	80	80
Box Culvert	Km	10.5	10.5	10.5	10.5
Permanent Pumping Station		4	4		
1. Kalyanpur	m <sup>3</sup> /s	20	20	20	20
2. Dholaikhal	m <sup>3</sup> /s	22	22	22	22
3. Rampura	m <sup>3</sup> /s	25	25	25	25
4. Kamalapur	m <sup>3</sup> /s	15	15	15	15

### Water and Sewerage Billing and Collection (In Lac Taka)

	2016-2017 (In lac taka)	2017-2018 (In lac taka)	2018-19 (In lac taka)	2019-20 (In lac taka)
<b>Billing</b>	105285.95	1191110.47	13062	13679.20
<b>Collection</b>	100055.82	117942.50	13067	12813.06
<b>Bill Receivable (Dues)</b>	44711.09	45881.06	4584	7661.46
<b>Equivalent dues Billing (monthly)</b>	5.46	4.96	4.46	5.46

### Water Tarrif

(in Taka)

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

### Development Projects

	2016-2017	2017-2018	2018-19	2019-20
Water Supply	5	5	7	6
Sewerage	1	1	1	2
Drainage	1	2	2	2
Technical Assistance Project	2	2	1	1
<b>Total</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>11</b>

## 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

## Corporate Directory Dhaka WASA Board



**Dr. M.A Rashid Sarkar**  
Chairman of Dhaka WASA Board

## Members



**Jahirul Islam**  
Member of Dhaka WASA Board



**Selina Akhter**  
Member of Dhaka WASA Board



**Kamrul Islam FCA**  
Member of Dhaka WASA Board



**Md. Mahmood Hossain**  
Member of Dhaka WASA Board



**Shaban Mahmood**  
Member of Dhaka WASA Board



**Dr. Mostafa Jalal Mohiuddin**  
Member of Dhaka WASA Board



**Engr. Md. Waliullah Sikder**  
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



**Md. Hasibur Rahman Manik**  
Member of Dhaka WASA Board

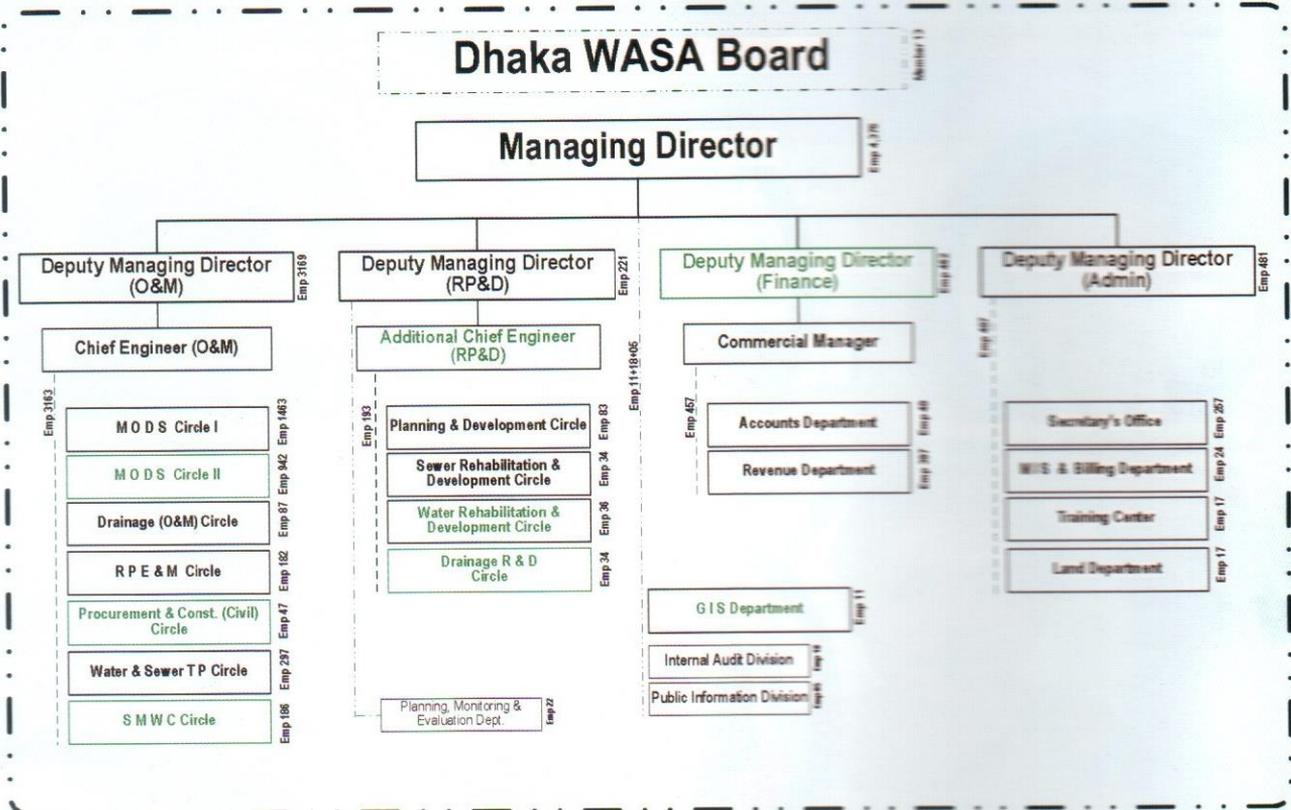


**Aleya Sarwar Daisy**  
Member of Dhaka WASA Board



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

# Organogram of Dhaka WASA



## 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, 10 in Dhaka City and 1 in Narayangang town.

### Water Production

During the period 2019-2020, Dhaka WASA has achieved the capacity of daily production of 2550 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 comes from surface water. Ground water is abstracted from 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 2020.

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 plant projects have already been under 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 of water per day in Dhaka. Moreover, Gadharbpur WTP is also under implementation. In Gandharb

Dhaka. Moreover, Gadharbpur WTP is also under implementation. In Gandharbpur, 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 being built at Josholdia near the bank of the great river Padma from which 450 MLD treated water will be supplied for Dhaka city dwellers.

Dhaka WASA has 410 diesel-driven generators (including 42 mobile generators) which help maintaining the abstraction of ground water during the interruption of power supplies. Particularly during the summer season the demand of water 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 had been undertaken and at least four sewage treatment plants will be constructed around the capital city. One of them is Dasherchandhi Sewage Treatment Plant, which is already under implementation and the rest are (in Uttara, Mirpur, Rayerbazar) will be implemented one by one in the future.

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

### **Drainage System**

Once there were sufficient canals in Dhaka city for drainage of water, among them Paribag, Dhanmondi, Begunbari, Dholaikhal, Debdolai, Segunbagicha and Arambagh canals are significant. These canals were used for water navigation, and plenty of wetland and low land in the city were used as reservoirs for rain water. During the rainy season the canals allowed the rain

water make its way to the surrounding rivers. The canals prevent water logging in the city areas.



Development of Kallyanpur Manin Khal

The Drainage problems of the city have become severe due to the filling of wetlands, implementation of different projects have narrowed and in some cases stopped the free flow of canals in some places by various developers.

Though Dhaka WASA was established 55 year ago, the drainage activity had only come within its jurisdiction 30 years ago. Drainage activity of Dhaka city was commenced in 1946 under the jurisdiction of Department of Public Health Engineering (DPHE). In March, 1989, after delivering the drainage activity to Dhaka WASA by a government gazette, a significant success was achieved in this field. Water logging has been a severe problem for a long time in Dhaka city. In the last 28 years, a combination of good management and the development of the drainage system of Dhaka city have improved.

It's a matter of great concern that disposal of different types of solid waste such as green coconut husks, empty plastic bottles, polyethylene bags and other solid wastes into the surface drains and open canals result in blocking the free flow of rainwater through drainage lines. DWASA is trying to reduce this problem by cleaning canals on regular basis as well as raising the awareness

among people. To increase public awareness, publicatoin of advertiserments are being continued through newspapers regularly.

Summary of the existing Drainage facilities are as follows:

Storm water drainage line (dia 450 mm to 3000 mm)	370 km
Box culvert	10.5 km
Open Channel (Khal)	78 km
Storm water pumping station	4
Kalyanpur	20 m <sup>3</sup> /s
Dholiaikhal	22 m <sup>3</sup> /s
Rampura	25 m <sup>3</sup> /s
Kamalapur	15 m <sup>3</sup> /s
Area under drainage facility	140 Sq. km

### Removal of Water Congestion

Every year Dhaka WASA runs cleaning activities of its drainage lines, box culverts and canals, which prevent much of the water congestion and flooding problems during rainy season.

It should be mentioned that, all the surface drains of Dhaka city and most of the internal drains are under the jurisdiction of Dhaka City Corporation (DCC), and most of the time those are filled with solid wastes. As a result, temporary water congestion occurs during heavy rainfall.

Nowadays city dwellers experience water congestion in some roads of the capital after heavy rain. It requires several hours to drain out congested rainwater, but that doesn't mean it is water-logging. There is no water-logging in Dhaka city rather water congestion is prevalent.

## 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 supplying 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 1<sup>st</sup> water treatment plant in South Asia. Since then piped water supply has been used in Dhaka city.

These lines were constructed around 144 years ago and became leaky in most of the places which caused NRW of 40-45%. Due to this leakage the water demand of city dwellers could not be fulfilled and on the other hand Dhaka Water Supply & Sewerage Authority (DWASA) was 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 people are served. Due to this unaccounted for water it becomes difficult to supply water to the people and eventually causing water crisis. This becomes serious especially during summer 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 that the network needed rehabilitation to significantly prevent loss of water.

To cope up the challenge to ensure safe water for the city dwellers along 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 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 Metered area (DMAs) to ensure 24/7 pressurized (1 bar or more) water supply in the network to reduce the water loss to 15% or less and to improved 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 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 54 DMAs have been established and remaining 91 DMAs are in progress. The amazing achievement of established DMAs is becoming a great focus to the customers 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 supplying water 24/7
- 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
- Survey and Model the selected DMA
- Rehabilitate the existing 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 were shifted. The average NRW has 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 water portable.
- No further use of suction pump.
- Reduced electricity cost of consumers DWASA.
- Decreased health cost.
- Increased DWASA Revenue.
- Water Supply provided in Low Income Community.
- 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 enhance 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 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.

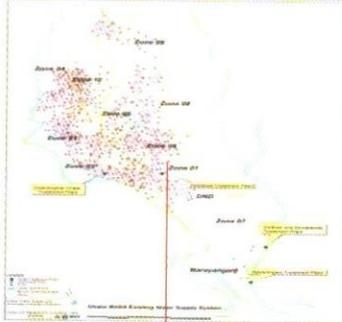
- **Pressure balancing in the water supply distribution network** - A properly designed water supply network demands a hydraulically balanced system to have reasonably uniform pressure over the entire command area of the network. This will ensure even distribution of flow to all the consumers. Present 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 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 efficient 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 safety plans, water quality safeguard etc.

Another technical innovative approach introduced is the Trench Less Technology, which brings the 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 for pipe installation in a 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, economical viability water supply system. Sustainable DMA Management capacity of Dhaka WASA will be enhanced gradually to run the system smoothly.

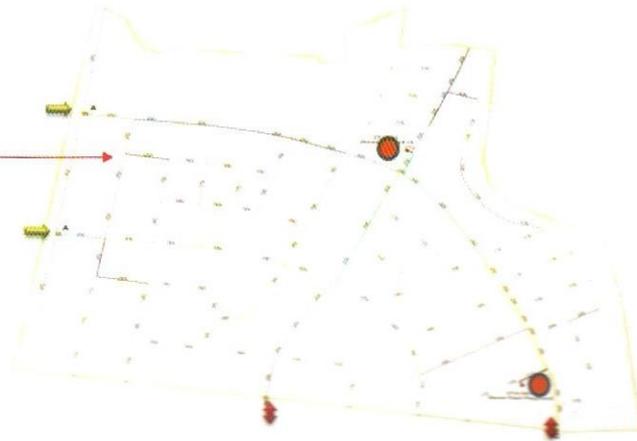
The DMA approach not only facilitates Unaccounted for Water (UFW), but also helps in maintaining assets for longer duration and enables better pressure management, better water quality and continuous water supply. DMA Managers, Deputy DMA Managers and Licensed plumbers have already been deployed for individual DMAs for installations of fresh connections, carrying out necessary repairs and will also 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 checked 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 in 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 2019-2020

### 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)	1274	3912	563	337	---
২	Distribution line at different holding of the consumers (Monitoring)	914	2514	457	457	---
৩	Underground reservoir at different holding of the consumers (Monitoring)	206	648	104	102	---
৪	Distribution line at different holding of the consumer(in response to the complaints made by consumer)	358	1159	197	149	---
৫	Underground reservoir at different holding of the consumer(in response to the complaints made by consumer)	390	1366	203	195	---
৬	Dhaka, Sonakanda and Godnail Water Works/Podmajosoldia	107	995	84	41	---
৭	Bangabhaban and WASA bhaban	390	1476	397	203	---
৮	Deep Aquifers/Replaced Tube Wells	184	1324	184	0	---
৯	Bottle Plant (Shanti) /Vakorta project	146	884	140	44	---
১০	Honorable PM's Office Related Pump	36	206	36	18	---
১১	Water Sample/Chemical Tests with	58	407	40	12	---

## Geographical Information System (GIS)

The actual GIS activity started from April'2011. Following functions were implemented so far:

**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 the transmission lines have 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. Base-line 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 compiled data base or mapping of road, water body, house position, bridge, culvert and also other utilities network.

**House Connection mapping** Dhaka WASA has been determined to be a part of Digital Bangladesh and progressing step by step 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 being used in DMA management.

**Bulk Meter mapping** Bulk meters are used 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 included in GIS.

**Digital elevation modelling (DEM):**

Ground elevation is the important component for water, sewer and drainage network Design. Ground elevation is extracted using stereo image and ground control point (GCP) from Remote sensing technology. Mapping of ground level has been included 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 127 foreign, local and in-house training courses during the period from 1 July 2019 to 30 June 2020**

A total of 127 courses both home and abroad was conducted during the period from 1 July 2019 to 30 June 2020. Of them fifteen foreign, twenty eight local and eighty four in-house training courses were facilitated to the officials and staff of Dhaka WASA. The foreign courses attended by 67 officers from Dhaka WASA included Masters of Engineering (Civil and Environmental Engineering) at The University of Adelaide, Australia, 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 Texas, Arlington, USA, Pump Technology for Flood Control in Thailand, NRW Management and DMA Operation & Maintenance in Manila, Philippines, Study Tour in the UK in UK, ITP:301D Sustainable Urban Water and Sanitation Integrated Process in Sweden and Nepal, Study Visit in Korea, Study/Exposure Visit in Japan, Ongoing Exchange of best practices between DWASA and the largest utilities of the Netherlands in the Netherlands, Capacity Building Workshop in Korea, Roundtable on Financing Water in Philippines.

The local training courses were Try-out workshop 2nd training module- DMA Caretaker Approach at Hotel La Vinci Limited, ORHCSA & RHCE Training with Red Hat Vendor Examination at LINUX Pathshala, Public Procurement Management at ESCB, Munshiganj, Refresher workshop at Hotel La Vimchi, Workshop on Module 1 (NRW) at Hotel La Vimchi, Workshop on Module 2 (Caretaker) at Hotel La Vimchi, Training on ADB's New Procurement Guideline at BRAC CDM, Gazipur, Senior Security Course-2019 at NSI Training Institute, Basic Procurement Training at ESCB, Gazaria, Digital Service Design and Planning at LGD, Using Ground Water Models to make Water Management Decision in DU, Basic Procurement Training at ESCB, Basic Procurement Training at ESCB, Project Planning and Management (PPM) at NAPD, Data Entry through AMS at ICT Cell, Planning Division, Data Entry in IBAS+++ at Institute of PFB, Climate Adaptation and Mitigation at Finance Division, Public Private Partnership at SNV Netherlands Development Organization, E-nothi Office Management, A2i (Online). Numbers of participants for the local training courses were 120.

The rest of the in-house training programs are Auto CAD 2D, Basic Human Resource Management (3 courses), Capacity Building training on report writing and documentation Disbursement Procedure, invoicing and IPC checking, DMA Caretaker Approach (3courses), DMA commissioning (3 courses), Drilling and Well Construction, Duties and Responsibilities of Lab Technician and Lab Assistant, E-file Refreshers Training E-GP (2 courses), Emotional intelligence-Be self-motivator, E-nothi office Management (4 courses), Expert Data Analysis with MS Excel, Gender and Development, Innovation training on service process simplification, Introduction to NRW and DMA Management, Manner, Etiquette and Office Protocol (3 courses), Master your power-point presentation, O&M of ABB & VFD (3 courses), O&M of Pumps (2 courses), Occupational Health and Safety (2 courses), Orientation Course, Preparation of IT Return (5 courses), Public Procurement Management, Revenue Billing Collection and Customer Care (3 courses), SDG-DWASA Perspective, Staff Development Course (2 courses), ToT on Benchmarking, Trainer Selection Workshop, Training Course on New Tax Rules and its Calculation Process, Training for Billing Assistant (11 courses), Training for PO/APO (2 courses), Training on Benchmarking (2 courses), Training on DWASA Training Information Management System, Training on Environment, Training on GIS, Training on Grievance Redress Mechanism (GRM), Training on handling DMA Maintenance Equipment and Accessories, Training on SCADA (2 courses), Training on VAT-Tax (3 courses), Training Workshop on NIS, Using GIS in water distribution system, Water meter installation, replacement, maintenance, servicing and DMA System, Workshop on TOT, Workshop on Yearly Minimum 60-Hrs Training Implementation and Progress (2 courses). 1760 officers and staffs of DWASA participated in in-house training programs.

<b>Summary of Training (July 2019-June 2020)</b>				
	No of Courses	No of Participants		
		Officer	Staff	total
In-house	84	1184	576	1760
Local	28	120	-	120
Foreign	15	67	-	67
<b>Total</b>	<b>127</b>	<b>1371</b>	<b>576</b>	<b>1947</b>

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

**Dhaka WASA**

**Annual Report for The FY 2019-20**

Dhaka WASA as an authority has achieved tremendous success and has become a role model for the utility sectors in the South-East Asia. Dhaka Water Supply and Sewerage Authority (DWASA) is an autonomous commercial organization with the mandate to supply water and dispose the sewage. Dhaka is the primate city of Bangladesh, accounting for one-fifth of its GDP and almost half of its formal employment. Dhaka WASA aims to provide quality and uninterrupted water and sanitation services to the city dwellers of Dhaka. DWASA collects, treat, preserve and supplies water as well as carries out safe disposal of domestic sewage for the public, industries and commercial concerns.

It is committed for environment friendly, sustainable development and pro-people in water and sanitation management. At present, Dhaka WASA is capable to supply water to the city dwellers hundred percent against their demand. And also, at the same time DWASA is committed to achieve and to access the adequate and equitable sanitation and hygiene for all by the year 2030.

To ensure safe, sufficient, affordable and reliable water and sanitation related targets mentioned in the SDGs, 8th. Five-year Plan and Vision 2021, DWASA undertook three Master Plans namely:

**i) Water Master Plan; ii) Sewerage Master Plan; iii) Drainage Master Plan**

On the basis of the above-mentioned Master Plans, in 2019-20 Financial Year, DWASA had implemented 10 development projects and 01 Technical Assistance (TA) Project. Those projects were included in the Annual Development Program (ADP) in the said year. Among the said projects: seven were investment projects in water supply and four projects were for sewerage and drainage system. Planning, Monitoring and Evaluation Division exclusively is engaged to support to implement and to monitor those projects. The said projects were 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 : 5,24,806.00 Lakh Taka
  - ◆ Allocation : 121,161.00 Lakh Taka
  - ◆ Release : 97,125.00 Lakh Taka
  - ◆ Expenditure : 95,494.91.00 Lakh Taka
  - ◆ Physical Progress : 94.95 %
  - ◆ Financial Progress : 78.82 %
- II) Name : Saidabad Water Treatment Plant Project Phase -III
- ◆ Duration : July' 2015 to June ' 2020
  - ◆ Estimate Cost : 459736.05 Lakh Taka
  - ◆ Allocation : 50.00 Lakh Taka
  - ◆ Release : 25.00 Lakh Taka
  - ◆ Expenditure : 24.56 Lakh Taka
  - ◆ Physical Progress : 70.00 %
  - ◆ Financial Progress : 49.12%
- III) Name : Dhaka Water Supply Network Improvement Project
- ◆ Duration : April' 2016 to December ' 2021
  - ◆ Estimate Cost : 318230.00 Lakh Taka
  - ◆ Allocation : 16188.75 Lakh Taka
  - ◆ Release : 15106.68 Lakh Taka
  - ◆ Expenditure : 13728.86 Lakh Taka
  - ◆ Physical Progress : 9.13%
  - ◆ Financial Progress : 84.80%
- IV). Name : Development of Dhaka WASA Activities in LIC Localities including Capacity Building and Financial Modeling under the framework of Saidabad Phase- III Project (2nd Amended)
- ◆ Duration : May' 2016 to June ' 2020
  - ◆ Estimate Cost : 6000.00Lakh Taka
  - ◆ Allocation : 450.00 Lakh Taka
  - ◆ Release : 450.00 Lakh Taka
  - ◆ Expenditure : 342.23.00 Lakh Taka
  - ◆ Physical Progress : 80.00 %
  - ◆ Financial Progress : 76.05%

- V) 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 : 1510.00 Lakh Taka  
 Release : 1510.00 Lakh Taka  
 Expenditure : 1480.00 Lakh Taka  
 Physical Progress : 100 %  
 Financial Progress : 98.00%
- VI) Name : Emergency Water Supply Project  
 Duration : January' 2020 to December ' 2023  
 Estimate Cost : 73232.00Lakh Taka  
 Allocation : 4238.85 Lakh Taka  
 Release : 2000.00 Lakh Taka  
 Expenditure : 2000.00 Lakh Taka  
 Physical Progress : 165.14 %  
 Financial Progress : 47.18%

## 2. Investment Projects on Sewerage and Drainage System

- I) Name : Dasherbandi Sewage Treatment Plant Project.  
 Duration : July' 2015 to 02 June' 2020  
 Estimate Cost : 371254.00 Lakh Taka  
 Allocation : 81200.00 Lakh Taka  
 Release : 80789.23 Lakh Taka  
 Expenditure : 66787.91  
 Physical Progress : 100 %  
 Financial Progress : 82.25 %
- II) Name : Preparatory Activities of Dhaka Sanitation Improvement Project (PADSIP)  
 Duration : October' 2017 to December' 2019  
 Estimate Cost : 4187.50 Lakh Taka  
 Allocation : 2218.00 Lakh Taka  
 Release : 1185.18 Lakh Taka  
 Expenditure : 2009.94 Lakh Taka  
 Physical Progress : 100%  
 Financial Progress : 90.62 %

- III) Name : Land Acquisition and Excavation/ Re-excavation of Hazaribagh, Baishteki, Kurmitola, Manda, & Begunbarhi Khal
- Duration : 1st April '2018 to 31st December '2020 (1st Revised)
- Estimate Cost : 64551.32 Lakh Taka
- Allocation : 3637.00 Lakh Taka
- Release : 3637.00 Lakh Taka
- Expenditure : 1119.05 Lakh Taka
- Physical Progress : 40 %
- Financial Progress : 30.76%
- 
- IV) Name : Expansion of Drainage Network & Development of Canal in Dhaka City.
- Duration : July' 2018 to December '2020
- Estimate Cost : 55050.00 Lakh Taka
- Allocation : 6000.00 Lakh Taka
- Release : 5500.00 Lakh Taka
- Expenditure : 5500.00 Lakh Taka
- Physical Progress : 100.00 %
- Financial Progress : 91.60%
- 
- V) Name : Land Acquisition for Constraction of sewage Treatment Plant at Uttara.
- Duration : July' 2019 to June '2021
- Estimate Cost : 139800.00 Lakh Taka
- Allocation : 35.00 Lakh Taka
- Release : 11.00 Lakh Taka
- Expenditure : 10.46 Lakh Taka
- Physical Progress : 30 %
- Financial Progress : 29.89%

## B. Financial Progress of those projects

In FY 2019-20, total taka 2366.88 crore was allocated against those said projects in the Revised Annual Development Program (RADP). Taka 867.70 crore was allocated from the own fund of the Government of Bangladesh (GOB) and tk. 1499.18 crore was sanctioned from the development partners' fund as the Project Aid. In this said year, tk. 2073.39 crore has been released and tk. 1884.97 crore was incurred as expenditure. As a whole, the financial progress was 79.64 % in that time.

## C. Physical Progression of the said projects

Sl. no.	Name of the component		Progress
1.	Construction & rehabilitation of deep tube wells	:	101 no.
	Construction & rehabilitation of water lines	:	271 km.

In this time, the physical progression was 91% 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 2019-20:

- Emergency Replacement works for water lines at different areas of Dhaka City project
  - Emergency Water Supply Project
  - Land Acquisition for Construction of Sewage Treatment Plant at Uttara
- These three projects will carry over the period.

### B. Proposed Project in the FY 2019-20:

#### 1. Water Supply

- l) Name : Construction and Strengthening of main Distribution line for Padma (Jashaldia) Water Treatment Plant Project (Phase-I)
- Duration : July' 2019 to June' 2021
- Estimate Cost : 63291.00 Lakh Taka

- II) Name : Well Field Construction Project at Singair Upazilla  
(Part-II)
- Duration : July' 2020 to Dec' 2024
  - Estimate Cost : 99521.50 Lakh Taka

## 2. Sewerage and Drainage System

- I) Name : Preservation of Regulating Pond Adjacent to  
Kalyanpur Pumping Station (Phase-II)
- Duration : July' 2019 to June' 2021
- Estimate Cost : 45607.00 Lakh Taka
- II) Name : Dhaka Sanitation Improvement Project
- Duration : Jan' 2020 to Dec' 2024
- Estimate Cost : 45607.00 Lakh Taka

## ২০১৯ জুলাই হইতে ২০২০ জুন পর্যন্ত ঢাকা ওয়াসা বোর্ড সভায় গৃহীত সিদ্ধান্ত সমূহ নিম্নরূপঃ

- পদ্মা (যশলদিয়া) পানি শোধনাগারটি ৬ মাস পরিচালন ও রক্ষণাবেক্ষণের জন্য China CAMC Engineering Co. Ltd এর সর্বমোট = ১৮,১১,৫৯,৩৮৪/- (আঠার কোটি এগার লক্ষ উনষাট হাজার তিনশত চুরাশি) টাকায় পরিচালনা ও রক্ষণাবেক্ষণের প্রস্তাবে অনুমোদন প্রদান করা হয়।
- ঢাকা ওয়াসা কর্তৃক বাস্তবায়নাধীন “Dhaka Environmentally Sustainable Water Supply (DESWSP)” প্রকল্পের আওতায় Distribution Network Improvement (DNI) কাজের পরামর্শক Management and Supervision Consultant (MSC) প্যাকেজের উপদেষ্টা প্রতিষ্ঠান Kunhwa-DDC-FCEA JV and associated with Vernacular Consultant Ltd., Bangladesh এর দাখিলকৃত সংশোধিত প্রস্তাব, এডিবি কর্তৃক অনাপত্তিকৃত স্থানীয় মুদ্রায় Provisional Sum ২,৮২,৮৬,০০০.০০ (দুই কোটি বিরাশি লক্ষ ছিয়াশি হাজার) টাকা, কন্টিনজেন্সি ৩২,৩৪,৫০০.০০ (বত্রিশ লক্ষ চৌত্রিশ হাজার পাঁচ শত) টাকা, Reimbursable Amount + Key/Non Key Expert Remuneration বেতন বাবদ ১০,১৩,৫৪,০২০.০০ টাকা মোট ১৩,২৮,৭৪,৫২০.০০ (তেরো কোটি আঠাশ লক্ষ চুয়ান্ডর হাজার পাঁচ শত বিশ) টাকা এবং বৈদেশিক মুদ্রায় USD 532,400.00 (পাঁচ লক্ষ বত্রিশ হাজার চারশত ইউএসডি) VAT ও TAX বাবদ ৪,৭৩,৭৫,৯৬০.০০ (চার কোটি তিহান্ডর লক্ষ পাঁচান্ডর হাজার নয়শত ষাট মাত্র) টাকা বা সর্বমোট সংশোধিত চুক্তিমূল্য ২২,২৮,৪২,৪৮০.০০ (বাইশ কোটি আঠাশ লক্ষ বিয়াল্লিশ হাজার চার শত আশি) টাকা এবং চুক্তির মেয়াদ ৩৬ মাস হতে ৬০ মাসে (অর্থাৎ ৩১ মার্চ/২০২০ পর্যন্ত) বর্ধিত করার প্রস্তাব যথাযথ কর্তৃপক্ষের অনুমোদনের জন্য স্থানীয় সরকার বিভাগ বরাবর প্রেরণের অনুমোদন প্রদান করা হয়।
- ঢাকা ওয়াসার “Dhaka Environmentally Sustainable Water Supply (DESWSP)” প্রকল্পের আওতায় ঢাকা ওয়াসার নিজস্ব জায়গায় রূপগঞ্জের গন্ধর্বপুর এলাকায় প্রথম পর্যায়ে দৈনিক ৫০০ মিলিয়ন লিটার (দৈনিক ৫০ কোটি লিটার) ক্ষমতা সম্পন্ন পানি শোধনাগার নির্মাণ শীর্ষক প্রকল্পের Resettlement ও তৎসংশ্লিষ্ট কাজ বাস্তবায়নের জন্য নিয়োজিত NGO প্রতিষ্ঠান Development Organization for the Rural Poor (DORP) কর্তৃক দাখিলকৃত সময় বৃদ্ধিসহ ব্যয় বৃদ্ধির প্রস্তাবটি VAT TAX ব্যতীরেকে Remuneration and Reimbursable Expenses ৭,২৭,৬৭,৪৩৪.০০ টাকা, Contingency ২২,১৯,০০০.০০ টাকা, Provisional Sum ৩২,৮৪,২৮৩.০০ টাকা সহ মোট ৭,৮২,৭০,৭১৭.০০ (সাত কোটি বিরাশি লক্ষ সত্তর হাজার সাতশত সতের) টাকা। ট্যাক্স ও ভ্যাট বাবদ ২,১১,৩৩,০৯৪.০০ টাকা সহ সংশোধিত চুক্তি মূল্য ৯,৯৪,০৩,৮১১.০০ (নয় কোটি চুড়ানব্বই লক্ষ তিন হাজার আটশত এগারো) টাকা অনুমোদন করা যেতে পারে এবং চুক্তির মোট মেয়াদকাল ৪২ মাস হতে বৃদ্ধি করে (জুন ২০২০ পর্যন্ত) ৬৪ মাসে বৃদ্ধির প্রস্তাব যথাযথ কর্তৃপক্ষের অনুমোদনের জন্য স্থানীয় সরকার বিভাগ বরাবর প্রেরণের অনুমোদন প্রদান করা হয়।

- “ ঢাকা ওয়াটার সাপ্লাই সেক্টর ডেভেলপমেন্ট প্রকল্প” এবং “ ঢাকা এনভায়রনমেন্টাল সাসটেইনেবল ওয়াটার সাপ্লাই প্রকল্প” এর আওতায় এ যাবৎ পর্যন্ত বাস্তবায়িত মোট ৬০টি DMA রক্ষণাবেক্ষণের জন্য চাহিদা অনুযায়ী আরও (১০-৯) = ১ (এক) জন **Manager** (তিন) জন **Deputy Manager** দুই বছরের জন্য চুক্তিভিত্তিক নিয়োগের নীতিগত অনুমোদন প্রদান করা হয়।
- ১৯৯৬ সালের ওয়াসা আইনের ৪০ ধারা ও ২০১০ সালের ঢাকা ওয়াসার নিরীক্ষক (সিএ ফার্ম) নিয়োগ নীতিমালা মোতাবেক ঢাকা ওয়াসার ২০১৮-১৯ হিসাব বছরের হিসাবের বার্ষিক নিরীক্ষা কাজ সম্পাদনের জন্য ছদা ভাসী চৌধুরী এন্ড কোং, চার্টার্ড এ্যাকাউন্ট্যান্টস-কে পুনঃ নিয়োগের অনুমোদন
- ঢাকা ওয়াসার উপ-ব্যবস্থাপনা পরিচালক (প্রশাসন) পদটির নাম পরিবর্তন করে (মানবসম্পদ ও প্রশাসন) করার প্রস্তাব অনুমোদন করা হয়।  
উপ-ব্যবস্থাপনা পরিচালক (মানবসম্পদ ও প্রশাসন) পদে সর্বসাকুল্যে মাসিক ২,০০,০০০/ টাকা বেতনে ৩ (তিন) বছরের জন্য নিয়োগের প্রয়োজনীয় কার্যক্রম গ্রহণের অনুমোদন প্রদান করা হয়।
- ঢাকা ওয়াসার আওতাধীন “ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রুভমেন্ট প্রজেক্ট”-  
**of Distribution Network for NRW reduction (Including procurement of plant and construction of DTW pump stations) with O&M support” Contract No-ICB-02.10** কাজের দরপত্র মূল্যায়ন প্রতিবেদন ও এতদ্বিষয়ে এশীয় উন্নয়ন ব্যাংক (ADB) কর্তৃক ইস্যুকৃত অনাপত্তি পত্র (NOC) বিষয়ে বিস্তারিত উল্লেখ করে মতামত প্রদানের জন্য **Central Procurement Technical Unit (CPTU) এবং Economic Relations Division (ERD)** এর নিকট পত্র প্রেরণ করা হয়।
- আগামী ০১ নভেম্বর, ২০১৯ হতে ওয়াসা ভবনের ভাড়া হার নিম্নোক্তভাবে পুনঃনির্ধারণ করা হয় :-

ভবনের নাম	ফ্লোরের নাম	বর্তমান ভাড়ার হার	পুনঃনির্ধারিত ভাড়ার হার
ওয়াসা ভবন	নীচ তলা-দ্বিতীয় তলা পর্যন্ত	৮০/- প্রতি বর্গফুট	১৩০/- প্রতি বর্গফুট
	চতুর্থ তলা-ষষ্ঠ তলা পর্যন্ত	৭০/- প্রতি বর্গফুট	১০৫/- প্রতি বর্গফুট
	সপ্তম তলা-তদুর্ধ্ব	৬৫/- প্রতি বর্গফুট	৯০/- প্রতি বর্গফুট

- ঢাকা ওয়াসার “ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রুভমেন্ট প্রজেক্ট”-এর **Distribution Network for NRW reduction (Including procurement of plant and construction of DTW pump stations) with O&M support” Contract No ICB-02.10** কাজের বিষয়ে এশীয় উন্নয়ন ব্যাংক এর মতামতের প্রেক্ষিতে ২১ জুন ২০১৯ তারিখে অনাপত্তির আলোকে দরপত্র মূল্যায়ন কমিটি কর্তৃক সুপারিশকৃত **China Construction Second Engineering Bureau Ltd. (China) & RFL Plastic Limited (Bangladesh) (CCSEB Recommended Contract Price (inclusive of VAT-IT and Provisional Sums) USD 40,083,287.29 এবং BDT 428,808,051.96** এর সমতুল্য (1 USD= 82.95 BDT সর্বমোট চুক্তি মূল্য BDT ৩,৭৫৩,৭১৬,৭৩২.৬৭ (তিনশত পঁচাত্তর কোটি সাঁয়ত্রিশ লক্ষ ষোল হাজার সাতশত বত্রিশ টাকা সাতষট্টি পয়সা মাত্র) (প্রাক্কলিতমূল্য হতে ৯.৯৬% কম) এর আর্থিক প্রস্তাব অনুমোদনের লক্ষ্যে প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য স্থানীয় সরকার বিভাগে প্রেরণের অনুমোদন প্রদান করা হয়
- ঢাকা ওয়াসার পদ্মা (যশলদিয়া) পানি শোধনাগার নির্মাণ প্রকল্পের আওতায় নির্মিত পানি শোধনাগারটির সুষ্ঠু পরিচালন ও রক্ষণাবেক্ষণের স্বার্থে নিম্নোক্ত সিদ্ধান্ত সমূহ গৃহিত হয়ঃ ক) প্রস্তাবিত জনবল কাঠামোর অনুমোদন প্রদান করা হলো। খ) ৮ (আট) জন **SCADA Shift Operator**

- **DMA** সমূহের টেকসই ব্যবস্থাপনা এবং ইহার সুষ্ঠু পরিচালনা ও রক্ষণাবেক্ষণের জন্য ০২(দুই) জন ম্যানেজার মোসাঃ হেনা মল্লিক ও জনাব মোঃ খলিলুর রহমান এবং ০২ (দুই) জন ডেপুটি ম্যানেজার জনাব শেখ রাজু মিয়া ও দিকন দেওয়ান-এর চুক্তিভিত্তিক চাকুরির চুক্তির মেয়াদ ১৯/১০/২০১৯ তারিখ হতে পরবর্তী ০২(দুই) বছরের জন্য বৃদ্ধির অনুমোদন প্রদান করা হয়। **DMA (District Metered Area)** ম্যানেজমেন্টের জন্য নীতিগত সিদ্ধান্ত (**Policy Decision**) তৈরীর ব্যবস্থা গ্রহণ করা হোক।
- ঢাকা ওয়াসা কর্তৃক “সাভার উপজেলার তেতুলঝরা-ভাকুর্তা এলাকায় ওয়েলফিল্ড নির্মাণ (১ম পর্ব)” শীর্ষক প্রকল্পের আওতায় নির্মিত “সাভার-কেরাণীগঞ্জ ওয়েলফিল্ড প্লান্ট”-টির পরিচালনা ও রক্ষণাবেক্ষণের জন্যঃ- (ক) ০৪ (চার) জন SCADA Operator ০১ (এক) বছরের জন্য সরাসরি চুক্তিভিত্তিক নিয়োগের অনুমোদন প্রদান করা হলো, যা নবায়নযোগ্য। এবং (খ) Procurement of Non-Consulting Service (OTM) এর মাধ্যমে ৬০ (ষাট) জন জনবল আউটসোর্সের মাধ্যমে ০১ (এক) বছরের জন্য নিয়োগের অনুমোদন প্রদান করা হলো, যা নবায়নযোগ্য।
- “ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রুভমেন্ট প্রজেক্ট”এর “**Rehabilitation of Distribution Network for NRW reduction (Including procurement of plant and construction of DTW pump stations) with O&M support**” Contract No-ICB-02.9 কাজের এশীয় উন্নয়ন ব্যাংক এর অনাপত্তির আলোকে দরপত্র মূল্যায়ন কমিটি কর্তৃক সুপারিশকৃত China First Metallurgical Group Co., Ltd. এর Evaluated Bid Price USD 10,656,591.74 এবং BDT 1,163,473,383.20 এর সমতুল্য সর্বমোট BDT 201,91,97,699.92 টাকা। দরপত্রের শর্ত মোতাবেক Provisional sum, alleviation program, contingencies, ইত্যাদি এর জন্য মোট USD 893,177.40 এবং BDT 114,032,585.40 টাকা অন্তর্ভুক্ত করে সর্বমোট চুক্তিমূল্য ২২০,৪৯,৫২,৪৩০.৫৪ (দুইশত বিশ কোটি ঊনপঞ্চাশ লক্ষ বায়ান্ন হাজার চারশত ত্রিশ টাকা চয়ান্ন পয়সা) টাকার ক্রয় প্রস্তাবটি স্থানীয় সরকার বিভাগে প্রেরণের অনুমোদন প্রদান করা হয়।
- দাশেরকান্দি পয়ঃ শোধনাগার প্রকল্পের ৪১৪MLD Catchment Area তে দ্রুত সময়ে Sewage Collection Network নির্মাণের জন্য Design, Drawing, Tender Document ইত্যাদি প্রনয়নের জন্য অতিরিক্ত ২,২৯,১৬,০০০/- (দুই কোটি ঊনত্রিশ লক্ষ ষোল হাজার) টাকা মাত্র (ভ্যাট ও ট্যাক্স ব্যতিত) সহ মোট ৮ ১৭,৭১,৪০,০০০.০০ (সতের কোটি একাত্তর লক্ষ চল্লিশ হাজার) টাকা মাত্র (ভ্যাট ও ট্যাক্স ব্যতিত) চুক্তিমূল্যে পরামর্শক প্রতিষ্ঠান Hankuk Engineering Consultants (HEC), Korea with Sub-consultants (a) Shah Technical Consultants Pvt. Ltd. India, (b) BETS Consulting services Ltd. Bangladesh & (c) Sodev Consult International Ltd. Bangladesh এর সাথে ঠিকবন্দরভূহ চুক্তি সম্পাদনের অনুমোদন প্রদান করা হলো। উল্লেখ্য, ভেরিয়েশনকৃত চুক্তিমূল্য প্রাক্কলিত মূল্য ২৬.০০ কোটি থেকে ৩১.৮৭% কম। ভ্যাট(১৫%) ও ট্যাক্স(১২%) সহ Variation এর পর মোট চুক্তিমূল্য দাঁড়ায় ৮ ২২,৪৯,৬৭,৮০০.০০ (বাইশ কোটি ঊনপঞ্চাশ লক্ষ সাতষট্টি হাজার আটশত) টাকা মাত্র। ক্রয় প্রস্তাবটি মাননীয় মন্ত্রী মহোদয়ের বিবেচনা ও অনুমোদনের জন্য স্থানীয় সরকার বিভাগে প্রেরণের অনুমোদন প্রদান করা হয়

- ঢাকা ওয়াসার ২০১৮-২০১৯ হিসাব বছরের নিরীক্ষা প্রতিবেদন অনুমোদন করা হয়।
- জাতীয় রাজস্ব বোর্ডের চেয়ারম্যান বরাবর স্ব-মন্ত্রণালয়ের মাধ্যমে কর্পোরেট ট্যাক্স সম্পূর্ণরূপে অব্যাহতি এবং পানি ও পয়ঃ বিলের উপর ধার্যকৃত ভ্যাট ১৫% এর পরিবর্তে ৫% করার জন্য পত্র প্রেরণের ব্যবস্থা গ্রহণ করা হয়।
- নিরীক্ষা ফর্ম কর্তৃক উপস্থাপিত পর্যবেক্ষণসমূহ গঠিত সাব কমিটির সুপারিশের আলোকে নিষ্পত্তির কার্যক্রম গ্রহণ করা হয়।
- ওয়াসা আইন ১৯৯৬(৬) এর ৩৪ নং ধারা এবং আর্থিক প্রবিধানমালা ২০০৯ এর বাজেট সংশ্লিষ্ট ধারা অনুযায়ী ২০১৯-২০২০ অর্থ বছরের সংশোধিত বাজেট এবং ২০২০-২০২১ অর্থ বছরের প্রাক্কলিত বাজেট অনুমোদন করা হয়।
- ২০১০ এর ওয়াসা প্রবিধানমালার বিধি ৩৪ এর উপ-প্রবিধান-(৩) অনুযায়ী ২০১৮-১৯ হিসাব বৎসরের পারফরমেন্সের উপরে ঢাকা ওয়াসা স্থায়ী, চুক্তিভিত্তিক ও প্রেষণে নিয়োজিত কর্মকর্তা ও কর্মচারীগণকে ৪(চার)টি মূল বেতনের সমপরিমান পারফরমেন্স এ্যাওয়ার্ড অনুমোদন করা হয়।
- ঢাকা ওয়াসা আইন ১৯৯৬ এর ধারা ৩০ এর আলোকে ডাইরেক্টর (উন্নয়ন) পদে জনাব মোঃ আবুল কাশেম এবং ডাইরেক্টর (টেকনিক্যাল) পদে জনাব মোঃ শহিদ উদ্দিন এর চুক্তিভিত্তিক নিয়োগের মেয়াদ আরও ২(দুই) বছর বৃদ্ধির অনুমোদন প্রদান করা হয়।
- ঢাকা ওয়াসার বিদ্যমান টিনসেড কোয়ার্টারগুলি অনেক পুরাতন ও জরাজীর্ণ, বিল্ডিং কোয়ার্টারগুলির ন্যায় মানসম্মত ও বসবাসের যথোপযুক্ত বাসস্থান না হওয়ায় কোয়ার্টারে বসবাসকারী বিভিন্ন বেতন স্কেলভুক্ত কর্মচারীগণের বাড়ি ভাড়া যথাক্রমে ৬৫%, ৬০%, ৫৫% ও ৫০% হতে কমিয়ে মূল বেতনের গড়ে ৪০% হারে কর্তন করার অনুমোদন প্রদান করা হয়।
- সায়েদাবাদ পানি শোধনাগার ফেজ-২ এর ৫৬ (ছাপান্ন) জনজনবলের ৩ (তিন) বৎসর (২ বৎসর অর্থাৎ ২০১৮ ও ২০১৯ সালে ১ম পর্যায়, পরবর্তী ২০২০ এর ১ বৎসর ২য় পর্যায়) চুক্তি (পোস্টফ্যাক্টো) হিসাবে সংশোধনী অনুমোদন প্রদান করা হলো।

## 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 (IESBA 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.

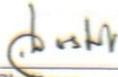
The engagement partner on the audit resulting in this independent auditor's report is Md. Enamul H. Choudhury.

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
<b>Service delivery earnings (Revenue)</b>			
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
<b>Total income (A)</b>		<b>15,061,977,324</b>	<b>14,439,588,034</b>
<b>Operating expenses</b>			
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
<b>Total operating expenses (B)</b>		<b>13,153,945,228</b>	<b>13,764,891,331</b>
<b>Operating profit (A-B)</b>		<b>1,908,032,096</b>	<b>674,696,703</b>
Interest expense	24	1,289,608,907	142,954,960
<b>Profit Before Tax</b>		<b>618,423,189</b>	<b>531,741,743</b>
Income tax		154,605,797	132,972,936
<b>Profit After Tax</b>		<b>463,817,392</b>	<b>398,768,807</b>
<b>Total comprehensive income for the period</b>		<b>463,817,392</b>	<b>398,768,807</b>

*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
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Dhaka,  
11 January 2021



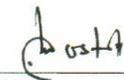
*S. F. Ahmed & Co.*

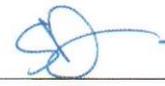
S. F. Ahmed & Co.  
Chartered Accountants

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
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	4	84,277,143,883	64,940,513,884
Intangible assets	5	101,637,592	108,829,110
Capital work-in-progress	6	52,877,469,840	29,389,760,614
<b>Total non-current assets</b>		<b>137,256,251,315</b>	<b>94,439,103,608</b>
<b>Current assets</b>			
Materials and supplies	7	1,828,124,547	3,066,827,154
Service delivery earnings (SDE) receivables	8	7,647,197,909	6,827,739,017
Advances, deposits and prepayments	9	1,033,967,509	2,122,834,979
Investments	10	2,983,407,970	3,164,215,665
Other receivables	11	81,153,926	21,082,895
Advance income tax	12	264,035,787	228,069,831
Cash and cash equivalents	13	3,594,796,901	3,256,235,820
<b>Total current assets</b>		<b>17,432,684,549</b>	<b>18,687,005,361</b>
<b>Total assets</b>		<b>154,688,935,864</b>	<b>113,126,108,969</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Capital and reserve</b>			
Capital fund		1,540,252,387	47,393,000
Revaluation surplus		21,868,756,508	23,362,510,432
Contingency & reserve for self insurance		7,364,890	-
Retained earnings		8,168,851,026	(1,492,016,926)
<b>Total equity</b>		<b>31,585,224,811</b>	<b>21,917,886,506</b>
<b>Non-current liabilities</b>			
Grants and other funds	14	85,244,324,791	71,784,095,295
Deferred tax liability	15	5,137,818,597	7,787,503,478
Loans and borrowings	16	26,814,757,726	(106,493,088)
<b>Total non-current liabilities</b>		<b>117,196,901,114</b>	<b>79,465,105,685</b>
<b>Current liabilities</b>			
Loans and borrowings		3,000,000,000	2,019,500,000
Liabilities for expenses	17	892,651,671	8,005,832,621
Other liabilities	18	1,641,264,811	1,456,270,208
Provision for audit fee		860,000	747,500
Provision for government dividend		5,000,000	5,000,000
Provision for taxation	19	367,033,457	255,766,450
<b>Total current liabilities</b>		<b>5,906,809,939</b>	<b>11,743,116,779</b>
<b>Total liabilities</b>		<b>123,103,711,053</b>	<b>91,208,222,464</b>
<b>Total equity and liabilities</b>		<b>154,688,935,864</b>	<b>113,126,108,969</b>

*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.*  
S. F. Ahmed & Co.  
Chartered Accountants

# DWASA Turnaround 2019\_2020



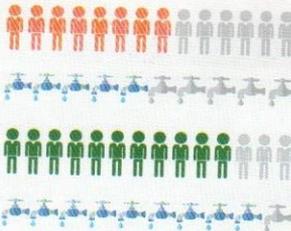
D H A K A  
Water Supply & Sewerage Authority  
**W A S A**



## 12 Years ACHIEVEMENTS of "Dhaka WASA Turnaround Program"

**YEAR**  
2019-2020

### WATER SUPPLY



**shortage**

**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).

**excess**

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

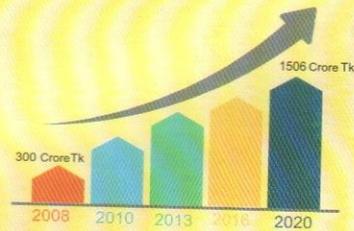
**2020 WATER PRODUCTION**  
Water Production of Dhaka WASA is 2600 million liters per day (MLD).

### SYSTEM LOSS



### 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.



### 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.





## 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



## 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, Dasherikandi Sewage Treatment Plant Project and Dhaka Sanitation Improvement Project are under construction



WASA

**Citizen Charter (15.11.2020)**

[http://www.dwasa.org.bd/site/view/citizen\\_charter](http://www.dwasa.org.bd/site/view/citizen_charter)

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



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**WASA Link 16162**

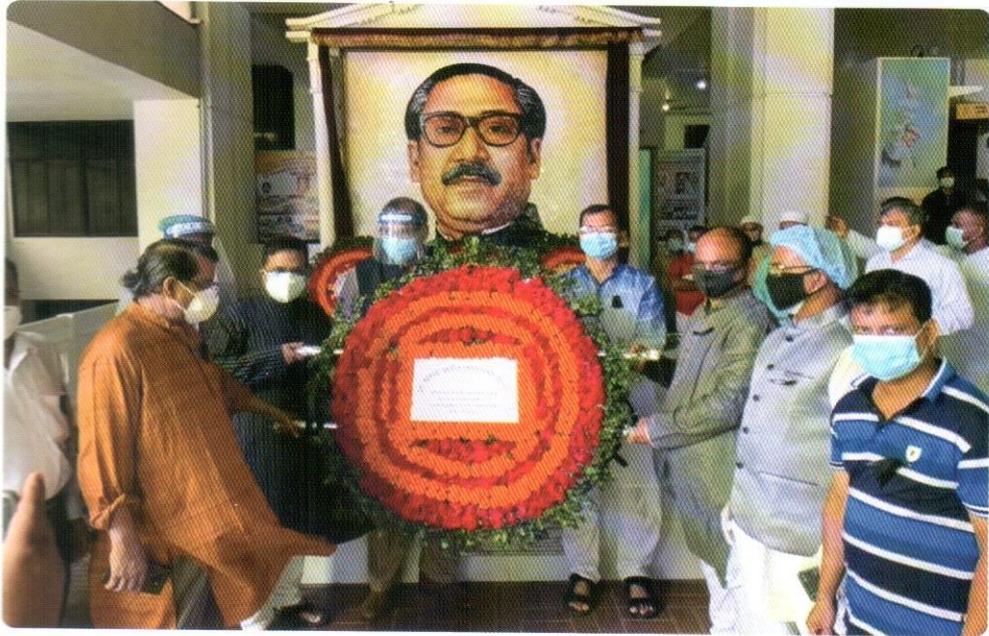
**Digital Bangladesh, Digital WASA**

## DWASA Photo Gallery, 2019-2020

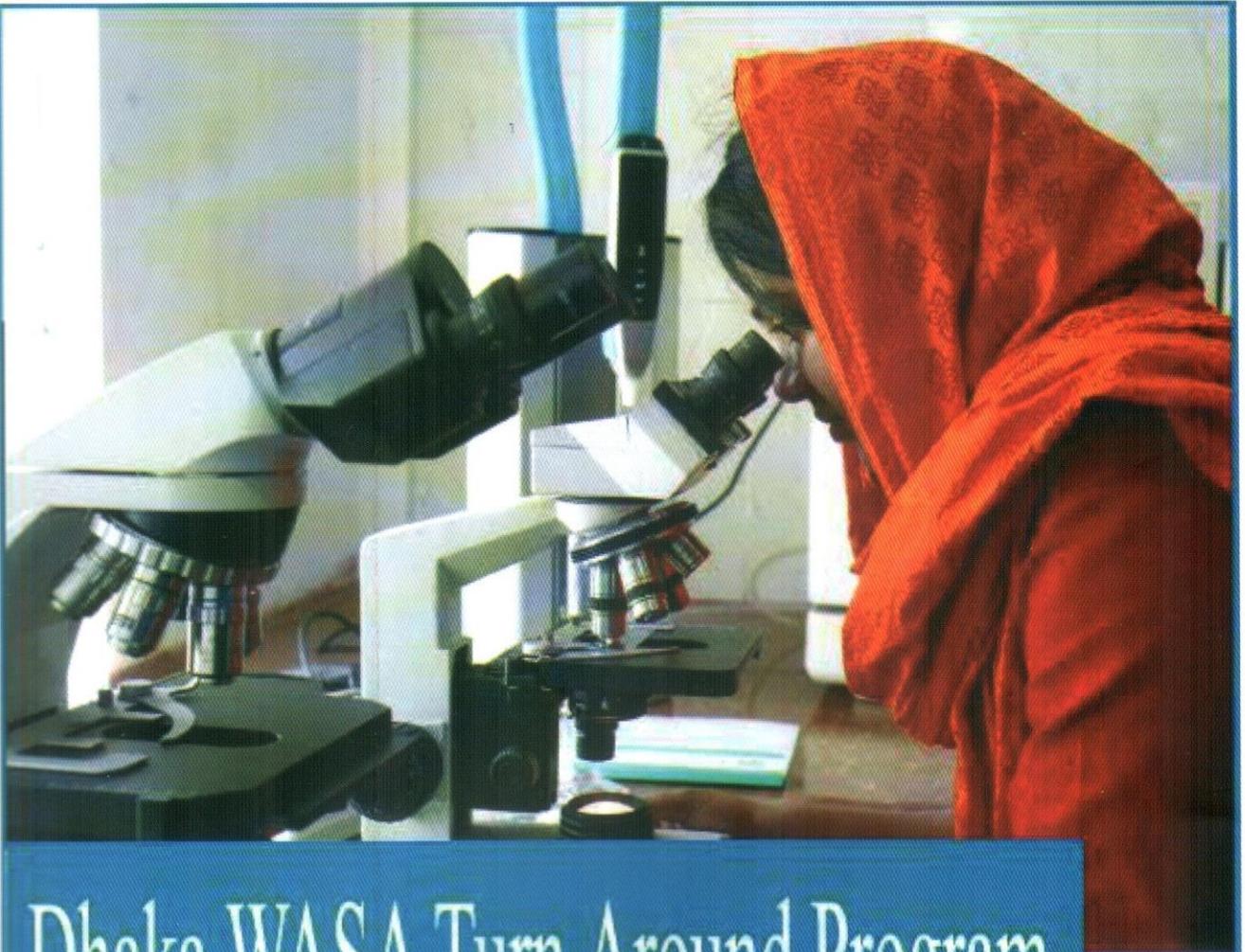












# Dhaka WASA Turn Around Program



## 10 Years of Success Story



Moving towards Smart Water Management System