

CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY



**MANAGEMENT INFORMATION SYSTEM REPORT  
JUNE-2022**

**WASA BHABAN  
DAMPARA  
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**Chattogram Water Supply & Sewerage Authority**  
**Monthly MIS Report**  
**June 2022**

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3
<b>Selected Key Indicators</b>							
E 17* Non Revenue Water	%	33	30	25	20	-51%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	145	93	100	90	61%	++
D 9* Collection period	Day	266	282	314	263	-7%	
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Em)	Nos.	7.3	N/A	8.3	9.4	22%	
D 8* Operating Ratio	Ratio	1.42	0.79	0.69	0.72	-9%	
A 3.5* Functioning meter rate of installed meter	%	95	N/A	96	100	-5%	
E 19 Water quality sample	No./month	200	2,400	1,800	200	0%	
E 18* Leakage occurrence	No./km/mth	0.25	0.38	0.43	0.50	23%	
A 6* Water supply coverage	%	62	N/A	60	75	-17%	
B 5* Average tariff	Tk/m3	14.82	14.28	13.73	14.73	1%	
E 16* Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	33.17	12.31	11.92	13.56	9%	
<b>A) Connection data</b>							
A 1 Total registered connections	Nos.	86,788	N/A	82,576	84,000	3%	
A 1.1 Billable (non-disconnected) connection	Nos.	81,005	N/A	76,849	78,000	4%	
A 1.2 Non-billable (disconnected) connection	Nos.	5,783	N/A	5,727	6000	4%	
A 1.3 Billed connection	Nos.	78,980	N/A	73,970	75,000	5%	
A 2 Breakdown of billable connection (by customer type)							
A 2.1* Domestic	%	93	N/A	97	96	-3%	
A 2.2 Non-domestic	%	7	N/A	3	4	-73%	!
A 3 Breakdown of billable connection (by meter status)							
A 3.1 Metered	Nos.	77,176	N/A	74,039	74,000	4%	
A 3.2 Average reading	Nos.	3,723	N/A	2,702	4,000	7%	
A 3.3 Non meter	Nos.	106	N/A	108	0	#DIV/0!	#DIV/0!
A 3.4* Meter installation rate	%	100	N/A	100	100	0%	
A 3.5* Functioning meter rate of installed meter	%	95	N/A	96	100	-5%	
A 4 Street Hydrant	Nos.	689	N/A	689	689	0%	
A 5 Religious Institutions	Nos.	368	N/A	368	368	0%	
A 6* Water supply coverage	%	62	N/A	60	75	-17%	
A 7 Bill sent-out ratio	%	98	N/A	96	100	-2%	

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks
<b>B) Tariff</b>							
B 1 Domestic	Tk/m3	13.02	N/A	12.40	13.02	0%	
B 2 Non-domestic	Tk/m3	31.82	N/A	30.30	31.82	0%	
B 3 Street Hydrant	Tk/m3	13.02	N/A	12.40	13.02	0%	
B 4 Religious Institutions	Tk/m3	13.02	N/A	12.40	13.02	0%	
B 5* Average tariff	Tk/m3	14.82	14.28	13.73	14.73	1%	
<b>C) Billing and Collection</b>							
C 1 Total billing	Tk	143,573,031	1,646,498,206	1,423,705,665	1,806,119,000	-9%	
C 1.1* Private	Tk	123,629,642	1,417,237,972	1,229,454,669	1,310,119,000	8%	
C 1.2* Government	Tk	19,943,389	229,260,234	194,250,996	496,000,000	-54%	!
C 2 Billed volume (Total Volume Accounted)	ML	9,685	115,273	103,690	122,640	-6%	
C 3 Total collection	Tk	207,544,820	1,532,296,451	1,417,998,870	1,623,619,000	-6%	
C 3.1* Private	Tk	173,726,591	1,385,932,394	1,245,465,366	1,365,119,000	2%	
C 3.2* Government	Tk	33,818,229	146,364,057	172,533,504	258,500,000	-43%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	145	93	100	90	61%	++
C 4.1* Private	%	141	98	101	104	35%	++
C 4.2* Government	%	170	64	89	52	225%	++
<b>D) Financial data</b>							
D 1 Revenue (Total)	Tk	229,589,165	1,828,840,771	1,736,502,206	2,149,619,000	-15%	
D 1.1 Water revenue	Tk	207,544,820	1,532,296,451	1,417,998,870	1,623,619,000	-6%	
D 1.2* Tubewell license	Tk	5,597,955	114,045,305	126,672,332	90,000,000	27%	++
D 1.3* Other operating revenues	Tk	8,113,057	82,499,015	96,831,004	336,000,000	-75%	!
D 1.4* Interest income	Tk	8,333,333	100,000,000	95,000,000	100,000,000	0%	
D 2 Expenses (Total)	Tk	478,438,501	2,032,959,163	1,653,696,147	2,078,403,000	2%	
D 2.1* Personnel cost	Tk	43,638,251	426,879,163	422,685,147	528,784,000	19%	
D 2.2 Electricity cost	Tk	66,109,000	652,415,000	564,704,000	703,000,000	7%	
D 2.3 Chemicals	Tk	79,986,000	141,233,000	91,434,000	140,000,000	-1%	
D 2.4* Depreciation	Tk	105,916,250	246,857,000	101,204,000	187,921,000	52%	++
D 2.5 Other operating cost	Tk	182,789,000	565,575,000	473,669,000	518,698,000	-9%	
D 2.5.1 Other O & M	Tk	135,854,000	220,317,000	111,358,000	185,908,000	-19%	
D 2.5.2 Capital cost from revenues	Tk	46,935,000	345,258,000	362,311,000	332,790,000	-4%	
D 2.6* Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3 Net Income ( Loss )	Tk	(248,849,336)	(204,118,392)	82,806,059	71,216,000	-387%	!
D 4* Cash at bank	Tk	0	N/A	0	0	N/A	
D 5* Stock & stores	Tk	0	0	0	0	N/A	
D 6 Accounts Receivable	Tk	1,271,740,973	N/A	1,223,432,356	1,223,432,356	-4%	
D 6.1* Accounts receivable from Government	Tk	210,605,008	N/A	252,100,239	252,100,239	16%	
D 6.2* Accounts receivable from Private	Tk	1,061,135,965	N/A	971,332,117	971,332,117	-9%	
D 7* Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8* Operating Ratio	Ratio	1.42	0.79	0.69	0.72	-9%	
D 9* Collection period	Day	266	282	314	263	-7%	

*Handwritten signature*

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3
<b>E) Water Supply</b>							
E 3 Capacity of Surface WTP (Mohora+Sk.H.WTP-1+Sk.H.WTP-2+)	MLD	466	N/A	323	323	44%	++
E 4 Capacity of Ground WTP	MLD	68	N/A	68	68	-1%	++
E 5 Deep Tube Wells in Operation	Nos.	47	N/A	60	44	7%	
E 6* Capacity of DTW - direct distribution	MLD	48	N/A	59	40	19%	
E 7* Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!	#DIV/0!
E 8* Capacity of distributable water production	MLD	581	N/A	449	430	35%	++
E 9 Length of Pipeline	km	962	N/A	770	1,037	-7%	
E 15* Production (distributable water)	ML	14,424.89	165,187	138,687	153,300	8%	
E 15.1* DTW water to users before boosters	ML	0	0	0	0	N/A	
E 16* Unit production cost (in/c Capt. Cost, Deprec. & Financial Expense.)	Tk/m3	33.17	12.31	11.92	13.56	9%	
E 17* Non Revenue Water	%	33	30	25	20	-51%	!
E 18* Leakage occurrence	No./km/mtth	0.25	0.38	0.43	0.50	23%	
E 19 Water quality sample	No./month	200	2,400	1,800	200	0%	
E 20* Satisfactory sample in chlorine level	%	100	100	100	100	0%	
E 21* Satisfactory sample in microbiological level	%	100	100	100	100	0%	
<b>F) Personnel</b>							
F 1 No. of permanent employees (Total)	Nos.	591	N/A	635	732	19%	
F 1.1 Grade-3-9	Nos.	59	N/A	57	60	N/A	++
F 1.2 Grade-10-11	Nos.	37	N/A	52	62	N/A	++
F 1.3 Grade-12-16	Nos.	254	N/A	280	300	N/A	++
F 1.4 Grade-17-20	Nos.	241	N/A	246	310	N/A	++
F 5 No. of non-permanent employees (Total)	Nos.	0	N/A	0	0	#DIV/0!	#DIV/0!
F 5.1 Work charge (6 month contract worker)	Nos.	0	N/A	0	0	N/A	++
F 5.2 Master roll (Daily basis casual worker) Outsource in	Nos.	0	N/A	0	200	N/A	++
F 5.3 Project staff (hired by project budget)	Nos.	50	N/A	41	50	N/A	++
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	7.3	N/A	8.3	9.4	22%	
F 3 Average Monthly Salary	Tk	18,802	N/A	18,807	19,960	6%	
F 4* % of Overtime to Basic Salary	%	1	N/A	10	32	98%	++
<b>G) Customer Services</b>							
G 1 New Service Connection							
G 1.1 Service Connection Application Received	Nos.	457	5,296	5,137	6,000	-12%	
G 1.2 Service Connection given	Nos.	534	4,934	4,394	5,000	-1%	
G 2 Billing complaints							
G 2.1 Complaints received	Nos.	160	2,510	1,798	4,500	44%	++
G 2.2 Complaints acted on	Nos.	120	2,050	1,469	3,500	41%	++
G 3 Leakage complaints received and attended	Nos.	237	4,422	3,978	5,000	12%	

# Notes

N/A = not applicable (= pointless to calculate, or nonexistent)

Some numbers may show the same value in spite of different values, which is due to rounding.

\*1 "this year target" can be set according to (1) Business Plan, (2) Performance Agreement, (3) discussion with D M D (Engineering), ( same or modified value of previous year)

\*2 Evaluation is made on the basis of variance from the set target. An evaluation result "X %" means that performance of particular indicator is X % better than what is set as the target.

if the NRW is 24% and the target is 20%, this performance is considered unfavorable. The evaluation result is shown as -20% (= 1 - 24 / 20).

If the number of water quality sample is recorded as 24 when the target is set at 20, this performance can be considered favorable. The evaluation result is shown as 20% (= 24 / 20 - 1).

\*3 A warning sign " ++ " appears when the evaluation result exceeds 25%, which is considered as the high-end threshold indicating "too good".

A warning sign " ! " appears when the evaluation result is less than - 25%, which is considered as the low-end threshold indicating "very bad".

A2.1: If the total number of billable connections is 45,000 and the number of domestic connections in billable connections is 36,000, this will be 80% (= 36000 / 45000).

A3.4: Meter installation rate = 1 - ( number of non-meter connection / number of billable connection).

A6\*: Water Supply Coverage=(Billed Connection x 26 Person per Connection + Total Street Hydrant x 80 Person per Street Hydrant) / Total Population in Water Supply Area \*100.

A7: Bill sent-out ratio = Billed connection / Billable connection x 100.

B5: Average water tariff = total billing / total billed volume

C1.1: "Private" includes private customers and users of loose water (sold by bowser)

C1.2: "Government" includes government users, street hydrants and religious institutions

C3.1: Same as C1.1

C3.2: Same as C1.2

C4: Revenue collection efficiency = collection /billing x 100. CWASA's existing accounting system cannot classify accounts receivable by age.

Therefore the revenue collection efficiency can be shown merely as (total collection during a period ÷ total billing during the same period).

C4.1: Same as C4

C4.2: Same as C4

C5: Metered volume to billed volume ratio data currently becomes available twice a year due to capacity limitation of computer section.

D1.2: "License and renewal fee of tubewell" in "other operating revenue"

D1.3: Excludes "License and renewal fee of tubewell"

D1.4: As the interest income is not obtainable until the year end, a proxy value is used here so that the net income can be computed. The proxy value is the previous year's monthly interest.

D2.1: Includes salary & allowances, provident fund, gratuity, festival bonus, overtime and earn leave encashment

D2.4: Data is only available quarterly instead of monthly. The cost of the latest three month is converted to a monthly average and shown in the monthly data column.

D2.6: Data is only available quarterly instead of monthly. The cost of the latest three month is converted to a monthly average and shown in the monthly data column.

D4: Under the current system, this value is not obtainable until the year end. However it is expected to become obtainable monthly in the future.

D5: Under the current system, this value is not obtainable until the year end. However it is expected to become obtainable monthly in the future.

D6.1: Same as C1.1

D6.2: Same as C1.2

D7: Long term liabilities outstanding as unpaid at the end of month

D8: To see more clearly the CWASA capacity to generate the operating profit before depreciation and interest, the operating ratio is defined as (personnel cost + elec. cost + chemical cost + other O & M) / (total Revenues).

D9: Collection period = (accounts receivable) / (monthly billings/number of days in month)

E6: Production capacity of deep tube wells that supply water directly to users

E7: Production capacity of deep tube wells that supply water to Karulgaht WTP

E15: Distributable water (or system input water) = Water produced at Surface WTP + Water produced at Ground WTP + Water directly distributed from DTW

E15.1: Raw water distributed directly to users from some DTWs on the way to boosters are not included in the distributable water (E15).

E16: Unit production cost =Expenses(Total)/(Distributable Water Volume+DTW Water directly distributed)\*1000

E17: NRW = (unbilled water / water produced x 100) = [ 1 - billed water / (distributable water production + DTW Water directly distributed ) ] x 100

E18: Leakage occurrence = Number of leakage recognized by complaint / length of pipeline at the end of period / number of months covered

E20: This is the rate of satisfactory sample complying with the chlorine standard.

E21: This is the rate of satisfactory sample complying with the microbiological standard.

F2: No. of employee per 1000 connections = (number of permanent staff + non-permanent staff) / (total billable connections/1000)

F4: Only staff workers (Class 3 and Class 4) receive overtime. Thus this ratio is computed based on Class 3 and Class 4 workers' pay.

Prepared by:

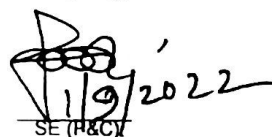
  
SAE

AE

  
XEN

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Executive Engineer (A.C)  
Design Division  
Chattogram WASA Chattogram

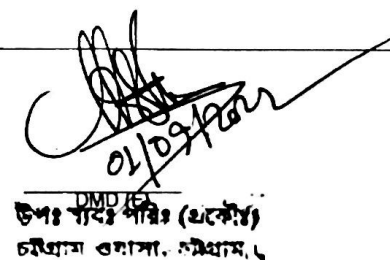
Submitted by:

  
SE (H&C)

মোহাম্মদ আরিফুল ইসলাম  
তত্ত্বাবধায়ক প্রকৌশলী  
(পরিকল্পনা ও নির্মাণ সার্কেল)  
চট্টগ্রাম ওয়াসা।

Noted by:

CE

  
DMD  
উপঃ বাবঃ পরিঃ (একোঃ)  
চট্টগ্রাম ওয়াসা, চট্টগ্রাম।