

CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY



**MANAGEMENT INFORMATION SYSTEM REPORT  
FOR THE MONTH OF JUNE-2023**

**WASA BHABAN  
DAMPARA  
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**Chattogram Water Supply & Sewerage Authority**  
**Monthly MIS Report**  
**June 2023**

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3	
							++	Too good ! Very bad
<b>Selected Key Indicators</b>								
E 17*	Non Revenue Water	%	31	31	30	23	-35%	!
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	85	87	93	99	-15%	
D 9*	Collection period	Day	222	235	282	263	11%	
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Em	Nos.	6.4	N/A	7.3	8.5	25%	
D 8*	Operating Ratio	Ratio	1.10	0.66	0.79	0.72	8%	
A 3.5*	Functioning meter rate of installed meter	%	92	N/A	95	100	-8%	
E 19	Water quality sample	No./month	200	2,400	2,400	2,400	-92%	!
E 18*	Leakage occurrence	No./km/mtf	0.24	0.35	0.38	5.04	93%	++
A 6*	Water supply coverage	%	64	N/A	62	75	-15%	
B 5*	Average tariff	Tk/m3	18.98	18.14	14.28	15.28	24%	
E 16*	Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	44.17	18.71	12.31	0.00	9%	
<b>A) Connection data</b>								
A 1	Total registered connections	Nos.	92,327	N/A	86,788	91,700	1%	
✓A 1.1	Billable (non-disconnected) connection	Nos.	86,395	N/A	81,005	85,700	1%	
✓A 1.2	Non-billable (disconnected) connection	Nos.	5,932	N/A	5,783	6000	1%	
✓A 1.3	Billed connection	Nos.	83,698	N/A	78,980	84,000	0%	
A 2	Breakdown of billable connection (by customer type)							
✓A 2.1*	Domestic	%	93	N/A	93	93	0%	
✓A 2.2	Non-domestic	%	7	N/A	7	7	3%	
A 3	Breakdown of billable connection (by meter status)							
✓A 3.1	Metered	Nos.	78,966	N/A	77,176	81,700	-3%	
✓A 3.2	Average reading	Nos.	7,326	N/A	3,723	4,000	-83%	!
✓A 3.3	Non meter	Nos.	103	N/A	106	106	3%	
A 3.4*	Meter installation rate	%	100	N/A	100	100	0%	
A 3.5*	Functioning meter rate of installed meter	%	92	N/A	95	100	-8%	
✓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	%	64	N/A	62	75	-15%	
A 7	Bill sent-out ratio	%	97	N/A	98	98	-1%	

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3	
							++	Too good ! Very bad
<b>B) Tariff</b>								
B 1 Domestic	Tk/m3	18.00	N/A	13.02	13.67	32%	++	
B 2 Non-domestic	Tk/m3	37.00	N/A	31.82	33.41	11%		
B 3 Street Hydrant	Tk/m3	18.00	N/A	13.02	13.67	32%	++	
B 4 Religious Institutions	Tk/m3	18.00	N/A	13.02	13.67	32%	++	
B 5* Average tariff	Tk/m3	18.98	18.14	14.28	15.28	24%		
<b>C) Billing and Collection</b>								
✓ C 1 Total billing	Tk	187,072,227	2,155,873,661	1,646,498,206	1,931,900,000	12%		
C 1.1* Private	Tk	164,755,223	1,888,365,971	1,417,237,972	1,552,430,000	22%		
C 1.2* Government	Tk	22,317,004	267,507,690	229,260,234	379,470,000	-30%	!	
✓ C 2 Billed volume (Total Volume Accounted)	ML	9,855	118,868	115,273	126,470	-6%		
✓ C 3 Total collection	Tk	158,516,138	1,878,166,418	1,532,296,451	1,916,900,000	-2%		
C 3.1* Private	Tk	141,332,837	1,738,727,636	1,385,932,394	1,712,297,000	2%		
C 3.2* Government	Tk	17,183,301	139,438,782	146,364,057	204,603,000	-32%	!	
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	85	87	93	99	-15%		
C 4.1* Private	%	86	92	98	110	-22%		
C 4.2* Government	%	77	52	64	54	43%	++	
<b>D) Financial data</b>								
D 1 Revenue (Total)	Tk	180,206,026	2,203,110,954	1,828,840,771	2,296,850,000	-4%		
D 1.1 Water revenue	Tk	158,516,138	1,878,166,418	1,532,296,451	1,916,900,000	-2%		
✓ D 1.2* Tubewell license	Tk	5,607,896	125,253,767	114,045,305	100,000,000	25%	++	
✓ D 1.3* Other operating revenues	Tk	7,748,659	99,690,769	82,499,015	179,950,000	-45%	!	
D 1.4* Interest income	Tk	8,333,333	100,000,000	100,000,000	100,000,000	0%		
D 2 Expenses (Total)	Tk	626,567,271	3,224,457,367	2,032,959,163	3,372,762,373	4%		
✓ D 2.1* Personnel cost	Tk	52,909,428	442,684,994	426,879,163	575,536,000	23%		
✓ D 2.2 Electricity cost	Tk	50,793,000	762,236,000	652,415,000	773,000,000	1%		
✓ D 2.3 Chemicals	Tk	23,881,000	111,276,000	141,233,000	140,000,000	21%		
✓ D 2.4* Depreciation	Tk	367,985,843	1,471,943,373	246,857,000	1,471,943,373	0%		
✓ D 2.5 Other operating cost	Tk	130,998,000	436,317,000	565,575,000	412,283,000	-6%		
✓ D 2.5.1 Other O & M	Tk	69,852,000	148,795,000	220,317,000	173,693,000	14%		
D 2.5.2 Capital cost from revenues	Tk	61,146,000	287,522,000	345,258,000	238,590,000	-21%		
D 2.6* Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!	
D 3 Net Income ( Loss )	Tk	(446,361,245)	(1,021,346,413)	(204,118,392)	(1,075,912,373)	-5%		
D 4* Cash at bank	Tk	0	N/A	0	0	N/A		
D 5* Stock & stores	Tk	0	0	0	140,034	N/A		
✓ D 6 Accounts Receivable	Tk	1,386,963,271	N/A	1,271,740,973	1,271,740,973	-9%		
D 6.1* Accounts receivable from Government	Tk	228,472,232	N/A	210,605,008	210,605,008	-8%		
D 6.2* Accounts receivable from Private	Tk	1,158,491,039	N/A	1,061,135,965	1,061,135,965	-9%		
✓ D 7* Long term loans	Tk	75,761,763	303,047,050	0	303,047,050	75%	++	
D 8* Operating Ratio	Ratio	1.10	0.66	0.79	0.72	8%		
D 9* Collection period	Day	222	235	282	263	11%		

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	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad	
<b>E) Water Supply</b>								
✓ E 3	Capacity of Surface WTP (Mohora+Sk.H.WTP-1+Sk.H.WTP-2+SR)	MLD	466	N/A	466	490	-5%	
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	0%	
✓ E 5	Deep Tube Wells in Operation	Nos.	48	N/A	47	47	2%	
E 6*	Capacity of DTW - direct distribution	MLD	35	N/A	48	48	-26%	!
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	569	N/A	581	605	-6%	
✓ E 9	Length of Pipeline	km	962	N/A	962	992	-3%	
✓ E 15*	Production (distributable water)	ML	14,184.84	172,320	165,187	164,250	5%	
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	44.17	18.71	12.31	20.53	9%	
E 17*	Non Revenue Water	%	31	31	30	23	-35%	!
E 18*	Leakage occurrence	No./km/mth	0.24	0.35	0.38	5.04	93%	++
✓ E 19	Water quality sample	No./month	200	2,400	2,400	2,400	-92%	!
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.	554	N/A	591	732	24%	
F 1.1	Grade-3-9	Nos.	54	N/A	59	60	N/A	++
F 1.2	Grade-10-11	Nos.	36	N/A	37	62	N/A	++
F 1.3	Grade-12-16	Nos.	229	N/A	254	300	N/A	++
F 1.4	Grade-17-20	Nos.	235	N/A	241	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	300	N/A	++
F 5.3	Project staff (hired by project budget)	Nos.	50	N/A	50	50	N/A	++
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	6.4	N/A	7.3	8.5	25%	
✓ F 3	Average Monthly Salary	Tk	19,364	N/A	18,802	19,960	3%	
✓ F 4*	% of Overtime to Basic Salary	%	14	N/A	1	32	55%	++
<b>G) Customer Services</b>								
G 1	New Service Connection							
✓ G 1.1	Service Connection Application Received	Nos.	418	5,202	5,296	6,000	-13%	
✓ G 1.2	Service Connection given	Nos.	143	4,769	4,934	5,000	-5%	
G 2	Billing complaints							
✓ G 2.1	Complaints received	Nos.	180	2,300	2,510	4,500	49%	++
✓ G 2.2	Complaints acted on	Nos.	150	1,819	2,050	3,500	48%	++
✓ G 3	Leakage complaints received and attended	Nos.	233	4,078	4,422	5,000	18%	

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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

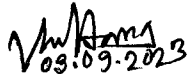
E18: Leakage occurrence = Number of leakage recognized by complaint / length of pipeline at the end of period / number of months covered

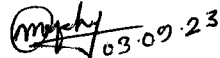
E20: This is the rate of satisfactory sample complying with the chlorine standard.


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

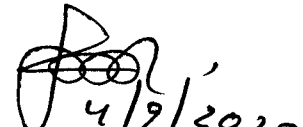
F2: No. of employee per 1000 connections = (number of permanent staff + non-permanent staff) / (total billable connections/1000)


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.


  
09.09.2023  
SAE

  
03.09.23  
AE

  
**(Richard Nelson Penheiro)**  
**Executive Engineer (A.C)**  
**Design Division**  
**Chattogram WASA, Chattogram.**

  
4/9/2023  
SE (P&C)  
মোহাম্মদ আরিফুল ইসলাম  
প্রকল্প পরিচালক  
(পরিচালনা ও নির্মাণ সার্কেল)  
চট্টগ্রাম ওয়াসা

  
08/09/2023  
CE  
মাকসুদ আলম  
প্রধান প্রকৌশলী  
চট্টগ্রাম ওয়াসা, চট্টগ্রাম।

  
DMD  
প্রকৌ. বিষ্ণু কুমার সরকার  
(উপসচিব)  
উপকরণ পরিচালক (প্রকৌশল)  
চট্টগ্রাম ওয়াসা, চট্টগ্রাম।