

**Chattogram Water Supply & Sewerage Authority**  
**Monthly MIS Report**  
**September 2020**

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad
Selected Key Indicators							
E 17* Non Revenue Water	%	22	23	28	25	8%	++
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	93	100	83	108	-14%	
D 9* Collection period	Day	270	287	324	263	-9%	
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Em	Nos.	9.0	N/A	9.1	10.0	10%	
D 8* Operating Ratio	Ratio	0.69	0.66	0.86	0.98	32%	
A 3.5* Functioning meter rate of installed meter	%	86	N/A	87	100	-14%	++
E 19 Water quality sample	No./month	150	450	1,200	150	0%	
E 18* Leakage occurrence	No./km/mth	0.39	0.35	0.43	0.50	30%	
A 6* Water supply coverage	%	57	N/A	57	75	-24%	
B 5* Average tariff	Tk/m3	14.67	13.83	12.97	12.63	16%	
E 16* Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	11.18	9.52	10.55	13.44	29%	
A) Connection data							
A 1 Total registered connections	Nos.	78,803	N/A	77,794	82,000	-4%	++
A 1.1 Billable (non-disconnected) connection	Nos.	73,164	N/A	72,163	76,000	-4%	
A 1.2 Non-billable (disconnected) connection	Nos.	5,639	N/A	5,631	6000	6%	
A 1.3 Billed connection	Nos.	70,747	N/A	69,370	73,000	-3%	
A 2 Breakdown of billable connection (by customer type)							
A 2.1* Domestic	%	97	N/A	97	96	1%	++
A 2.2 Non-domestic	%	3	N/A	3	4	30%	
A 3 Breakdown of billable connection (by meter status)							#DIV/0!
A 3.1 Metered	Nos.	62,971	N/A	62,294	66,000	-5%	
A 3.2 Average reading	Nos.	9,928	N/A	9,603	10,000	1%	
A 3.3 Non meter	Nos.	265	N/A	266	0	#DIV/0!	
A 3.4* Meter installation rate	%	100	N/A	100	100	0%	
A 3.5* Functioning meter rate of installed meter	%	86	N/A	87	100	-14%	
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	%	57	N/A	57	75	-24%	
A 7 Bill sent-out ratio	%	97	N/A	96	100	-3%	

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B) Tariff								
B 1	Domestic	Tk/m3	12.40	N/A	12.40	13.02	-5%	
B 2	Non-domestic	Tk/m3	30.30	N/A	30.30	31.82	-5%	
B 3	Street Hydrant	Tk/m3	12.40	N/A	12.40	13.02	-5%	
B 4	Religious Institutions	Tk/m3	12.40	N/A	12.40	13.02	-5%	
B 5*	Average tariff	Tk/m3	14.67	13.83	12.97	12.63	16%	
C) Billing and Collection								
C 1	Total billing	Tk	122,924,741	350,673,725	1,199,365,227	1,572,449,000	-11%	
C 1.1*	Private	Tk	104,748,076	300,000,490	1,022,107,233	1,140,313,000	5%	
C 1.2*	Government	Tk	18,176,665	50,673,235	177,257,994	432,136,000	-53%	!
C 2	Billed volume (Total Volume Accounted)	ML	8,379	25,350	92,471	124,480	-19%	
C 3	Total collection	Tk	114,643,001	352,269,946	999,936,576	1,700,275,000	-17%	
C 3.1*	Private	Tk	106,285,271	274,992,258	904,252,954	1,429,446,000	-23%	
C 3.2*	Government	Tk	8,357,730	77,277,688	95,683,622	270,829,000	14%	
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	93	100	83	108	-14%	
C 4.1*	Private	%	101	92	88	125	-19%	
C 4.2*	Government	%	46	153	54	63	-27%	!
D) Financial data								
D 1	Revenue (Total)	Tk	134,923,134	412,653,596	1,247,632,906	2,237,451,000	-26%	!
D 1.1	Water revenue	Tk	114,643,001	352,269,946	999,936,576	1,700,275,000	-17%	
D 1.2*	Tubewell license	Tk	5,390,505	17,844,345	88,080,389	90,000,000	-21%	
D 1.3*	Other operating revenues	Tk	6,972,961	18,789,305	64,615,941	352,176,000	-79%	!
D 1.4*	Interest income	Tk	7,916,667	23,750,000	95,000,000	95,000,000	0%	
D 2	Expenses (Total)	Tk	119,847,733	313,392,824	1,357,711,024	2,230,253,000	44%	++
D 2.1*	Personnel cost	Tk	36,429,733	114,690,824	421,236,024	512,607,000	11%	
D 2.2	Electricity cost	Tk	45,044,000	133,019,000	493,984,000	703,000,000	24%	
D 2.3	Chemicals	Tk	5,697,000	15,147,000	67,887,000	140,000,000	57%	++
D 2.4*	Depreciation	Tk	25,301,000	25,301,000	90,200,000	101,204,000	87%	++
D 2.5	Other operating cost	Tk	7,376,000	25,235,000	284,404,000	773,442,000	87%	++
D 2.5.1	Other O & M	Tk	6,574,000	10,711,000	91,126,000	143,702,000	70%	++
D 2.5.2	Capital cost from revenues	Tk	802,000	14,524,000	193,278,000	629,740,000	91%	++
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income ( Loss )	Tk	15,075,401	99,260,772	(110,078,118)	7,198,000	5416%	++
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	1,104,857,142	N/A	1,065,256,836	1,065,256,836	-4%	
D 6.1*	Accounts receivable from Government	Tk	233,303,480	N/A	211,109,539	211,109,539	-11%	
D 6.2*	Accounts receivable from Private	Tk	871,553,662	N/A	854,147,297	854,147,297	-2%	
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	0.69	0.66	0.86	0.98	32%	++
D 9*	Collection period	Day	270	287	324	263	-9%	

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E) Water Supply								
E 3	Capacity of Surface WTP (Mohora+Sk.H.WTP+Moduna Gh	MLD	323	N/A	323	323	0%	#DIV/0!
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	-1%	
E 5	Deep Tube Wells in Operation	Nos.	48	N/A	42	44	9%	
E 6*	Capacity of DTW - direct distribution	MLD	37	N/A	38	40	-8%	
E 7*	Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!	
E 8*	Capacity of distributable water production	MLD	427	N/A	428	430	-1%	
E 9	Length of Pipeline	km	770	N/A	770	920	-16%	
E 15*	Production (distributable water)	ML	10,719	32,930	128,662	165,970	-21%	++
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	11.18	9.52	10.55	13.44	29%	
E 17*	Non Revenue Water	%	22	23	28	25	8%	
E 18*	Leakage occurrence	No./km/mth	0.39	0.35	0.43	0.50	30%	
E 19	Water quality sample	No./month	150	450	1,200	150	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%	
F) Personnel								
F 1	No. of permanent employees (Total)	Nos.	658	N/A	658	730	10%	++
F 1.1	Grade-3-9	Nos.	59	N/A	57	70	N/A	
F 1.2	Grade-10-11	Nos.	54	N/A	55	60	N/A	
F 1.3	Grade-12-16	Nos.	291	N/A	291	315	N/A	
F 1.4	Grade-17-20	Nos.	254	N/A	255	285	N/A	
F 5	No. of non-permanent employees (Total)	Nos.	0	N/A	0	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)	Nos.	0	N/A	0	0	N/A	++
F 5.3	Project staff (hired by project budget)	Nos.	39	N/A	32	170	N/A	
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	9.0	N/A	9.1	10.0	10%	
F 3	Average Monthly Salary	Tk	24,705	N/A	17,366	19,960	-24%	!
F 4*	% of Overtime to Basic Salary	%	45	N/A	15	32	-40%	
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	493	1,267	4,305	6,000	-16%	
G 1.2	Service Connection given	Nos.	439	1,081	3,745	5,000	-14%	++
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	190	570	2,115	4,500	49%	
G 2.2	Complaints acted on	Nos.	150	440	1,854	3,500	50%	
G 3	Leakage complaints received and attended	Nos.	300	810	3,993	5,000	35%	

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 =  $1 - (\text{number of non-meter connection} / \text{number of billable connection})$ .

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.