

**Chattogram Water Supply & Sewerage Authority**  
**Monthly MIS Report**  
**March 2021**

	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	%	29	23	28	25	10%
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	133	99	83	108	23%
D 9*	Collection period	Day	354	323	324	263	-23%
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Em	Nos.	8.4	N/A	9.1	10.0	16%
D 8*	Operating Ratio	Ratio	0.41	0.63	0.86	0.98	36%
A 3.5*	Functioning meter rate of installed meter	%	97	N/A	87	100	-3%
E 19	Water quality sample	No./month	150	1,350	1,200	150	0%
E 18*	Leakage occurrence	No./km/mth	0.46	0.41	0.43	0.50	17%
A 6*	Water supply coverage	%	59	N/A	57	75	-22%
B 5*	Average tariff	Tk/m3	13.26	13.95	12.97	12.63	5%
E 16*	Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	9.88	9.92	10.55	13.44	26%
<b>A) Connection data</b>							
A 1	Total registered connections	Nos.	81,664	N/A	77,794	82,000	0%
A 1.1	Billable (non-disconnected) connection	Nos.	75,962	N/A	72,163	76,000	0%
A 1.2	Non-billable (disconnected) connection	Nos.	5,702	N/A	5,631	6000	5%
A 1.3	Billed connection	Nos.	72,858	N/A	69,370	73,000	0%
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	35%
A 3	Breakdown of billable connection (by meter status)						
A 3.1	Metered	Nos.	73,336	N/A	62,294	66,000	11%
A 3.2	Average reading	Nos.	2,500	N/A	9,603	10,000	75%
A 3.3	Non meter	Nos.	126	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	%	97	N/A	87	100	-3%
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	%	59	N/A	57	75	-22%
A 7	Bill sent-out ratio	%	96	N/A	96	100	-4%

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad
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	13.26	13.95	12.97	12.63	5%	
C) Billing and Collection							
C 1 Total billing	Tk	108,754,830	1,054,019,218	1,199,365,227	1,572,449,000	-11%	
C 1.1* Private	Tk	94,762,299	912,878,136	1,022,107,233	1,140,313,000	7%	
C 1.2* Government	Tk	13,992,531	141,141,082	177,257,994	432,136,000	-56%	!
C 2 Billed volume (Total Volume Accounted)	ML	8,202	75,556	92,471	124,480	-19%	
C 3 Total collection	Tk	144,856,189	1,043,533,696	999,936,576	1,700,275,000	-18%	
C 3.1* Private	Tk	138,116,055	917,828,885	904,252,954	1,429,446,000	-14%	
C 3.2* Government	Tk	6,740,134	125,704,811	95,683,622	270,829,000	-38%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	133	99	83	108	23%	
C 4.1* Private	%	146	101	88	125	16%	
C 4.2* Government	%	48	89	54	63	-23%	
D) Financial data							
D 1 Revenue (Total)	Tk	218,982,499	1,291,778,439	1,247,632,906	2,237,451,000	-23%	
D 1.1 Water revenue	Tk	144,856,189	1,043,533,696	999,936,576	1,700,275,000	-18%	
D 1.2* Tubewell license	Tk	55,872,952	100,299,134	88,080,389	90,000,000	49%	++
D 1.3* Other operating revenues	Tk	10,336,691	76,695,609	64,615,941	352,176,000	-71%	!
D 1.4* Interest income	Tk	7,916,667	71,250,000	95,000,000	95,000,000	0%	
D 2 Expenses (Total)	Tk	114,258,357	968,170,845	1,357,711,024	2,230,253,000	42%	++
D 2.1* Personnel cost	Tk	36,519,357	306,796,845	421,236,024	512,607,000	20%	
D 2.2 Electricity cost	Tk	40,287,000	392,596,000	493,984,000	703,000,000	26%	++
D 2.3 Chemicals	Tk	5,467,000	55,402,000	67,887,000	140,000,000	47%	++
D 2.4* Depreciation	Tk	25,301,000	75,903,000	90,200,000	101,204,000	87%	++
D 2.5 Other operating cost	Tk	6,684,000	137,473,000	284,404,000	773,442,000	76%	++
D 2.5.1 Other O & M	Tk	6,569,000	54,914,000	91,126,000	143,702,000	49%	++
D 2.5.2 Capital cost from revenues	Tk	115,000	82,559,000	193,278,000	629,740,000	83%	++
D 2.6* Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3 Net Income ( Loss )	Tk	104,724,142	323,607,594	(110,078,118)	7,198,000	5894%	++
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	1,243,168,912	N/A	1,065,256,836	1,065,256,836	-17%	
D 6.1* Accounts receivable from Government	Tk	303,067,511	N/A	211,109,539	211,109,539	-44%	!
D 6.2* Accounts receivable from Private	Tk	940,101,401	N/A	854,147,297	854,147,297	-10%	
D 7* Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8* Operating Ratio	Ratio	0.41	0.63	0.86	0.98	36%	++
D 9* Collection period	Day	354	323	324	263	-23%	

		Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad
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.	49	N/A	42	44	11%	
E 6*	Capacity of DTW - direct distribution	MLD	38	N/A	38	40	-6%	
E 7*	Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!	
E 8*	Capacity of distributable water production	MLD	428	N/A	428	430	0%	
E 9	Length of Pipeline	km	770	N/A	770	920	-16%	
E 15*	Production (distributable water)	ML	11,566.28	97,627	128,662	165,970	-22%	
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	9.88	9.92	10.55	13.44	26%	
E 17*	Non Revenue Water	%	29	23	28	25	10%	++
E 18*	Leakage occurrence	No./km/mth	0.46	0.41	0.43	0.50	17%	
E 19	Water quality sample	No./month	150	1,350	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.	637	N/A	658	730	13%	++
F 1.1	Grade-3-9	Nos.	57	N/A	57	70	N/A	
F 1.2	Grade-10-11	Nos.	53	N/A	55	60	N/A	
F 1.3	Grade-12-16	Nos.	281	N/A	291	315	N/A	
F 1.4	Grade-17-20	Nos.	246	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.	41	N/A	32	170	N/A	
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	8.4	N/A	9.1	10.0	16%	
F 3	Average Monthly Salary	Tk	17,697	N/A	17,366	19,960	11%	++
F 4*	% of Overtime to Basic Salary	%	28	N/A	15	32	12%	
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	537	4,080	4,305	6,000	-9%	
G 1.2	Service Connection given	Nos.	432	3,405	3,745	5,000	-9%	
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	138	1,557	2,115	4,500	54%	
G 2.2	Complaints acted on	Nos.	142	1,267	1,854	3,500	52%	++
G 3	Leakage complaints received and attended	Nos.	354	2,859	3,993	5,000	24%	

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.