Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
April 2019

		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**	%	**30**	**24**	**25**	**20**	**-20%**	
C 4*	**Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthl**	%	**101**	**92**	**87**	**95**	**7%**	
D 9*	**Collection period**	Day	**264**	**284**	**288**	**180**	**-58%**	!
F 2*	**No. of perma. employee per 1000 connections(excl. non-perma. Em**	Nos.	**10.0**	**N/A**	**10.9**	**10.0**	**0%**	
D 8*	**Operating Ratio**	Ratio	**0.68**	**0.74**	**0.89**	**0.90**	**18%**	
A 3.5*	**Functioning meter rate of installed meter**	%	**85**	**N/A**	**84**	**100**	**-15%**	
E 19	**Water quality sample**	No./month	**95**	**950**	**1,080**	**1,140**	**-92%**	!
E 18*	**Leakage occurrence**	No./km/mth	**0.55**	**0.55**	**0.43**	**0.52**	**-5%**	
A 6*	**Water supply coverage**	%	**57**	**N/A**	**55**	**65**	**-13%**	
B 5*	**Average tariff**	Tk/m3	**12.77**	**12.07**	**11.88**	**12.56**	**2%**	
E 16*	**Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)**	Tk/m3	**8.09**	**8.66**	**10.06**	**9.90**	**13%**	
A) Connection data								
A 1	Total registered connections	Nos.	73,884	N/A	70,238	71,500	3%	
A 1.1	Billable (non-disconnected) connection	Nos.	68,368	N/A	64,793	67,500	1%	
A 1.2	Non-billable (disconnected) connection	Nos.	5,516	N/A	5,445	4000	-38%	!
A 1.3	Billed connection	Nos.	66,534	N/A	62,703	67,000	-1%	
A 2	Breakdown of billable connection (by customer type)							
A 2.1*	Domestic	%	97	N/A	96	94	3%	
A 2.2	Non-domestic	%	3	N/A	4	6	44%	++
A 3	Breakdown of billable connection (by meter status)							
A 3.1	Metered	Nos.	57,788	N/A	53,702	60,000	-4%	
A 3.2	Average reading	Nos.	10,239	N/A	10,589	7,000	-46%	!
A 3.3	Non meter	Nos.	341	N/A	502	500	32%	++
A 3.4*	Meter installation rate	%	100	N/A	99	99	0%	
A 3.5*	Functioning meter rate of installed meter	%	85	N/A	84	100	-15%	
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	55	65	-13%	
A 7	Bill sent-out ratio	%	97	N/A	97	100	-3%	

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B) Tariff								
B 1	Domestic	Tk/m3	9.92	N/A	9.45	9.92	0%	
B 2	Non-domestic	Tk/m3	27.56	N/A	26.25	27.56	0%	
B 3	Street Hydrant	Tk/m3	9.92	N/A	9.45	9.92	0%	
B 4	Religious Institutions	Tk/m3	9.92	N/A	9.45	9.92	0%	
B 5*	Average tariff	Tk/m3	12.77	12.07	11.88	12.56	2%	
C) Billing and Collection								
C 1	Total billing	Tk	94,883,487	895,080,111	925,119,859	1,055,240,000	2%	
C 1.1*	Private	Tk	80,926,731	766,875,615	766,652,954	994,600,000	-7%	
C 1.2*	Government	Tk	13,956,756	128,204,496	158,466,905	60,640,000	154%	++
C 2	Billed volume	ML	7,430	74,141	77,871	84,000	6%	
C 3	Total collection	Tk	96,271,790	822,273,546	804,527,951	1,000,000,000	-1%	
C 3.1*	Private	Tk	86,075,191	745,381,301	709,270,366	900,000,000	-1%	
C 3.2*	Government	Tk	10,196,599	76,892,245	95,257,585	100,000,000	-8%	
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	101	92	87	95	7%	
C 4.1*	Private	%	106	97	93	90	18%	
C 4.2*	Government	%	73	60	60	165	-56%	!
D) Financial data								
D 1	Revenue (Total)	Tk	122,796,784	1,062,922,184	1,075,780,243	1,255,000,000	2%	
D 1.1	Water revenue	Tk	96,271,790	822,273,546	803,923,951	980,000,000	1%	
D 1.2*	Tubewell license	Tk	12,721,082	112,032,290	124,736,293	80,000,000	68%	++
D 1.3*	Other operating revenues	Tk	5,887,246	49,449,682	52,120,007	100,000,000	-41%	!
D 1.4*	Interest income	Tk	7,916,667	79,166,667	94,999,992	95,000,000	0%	
D 2	Expenses (Total)	Tk	85,690,803	845,707,467	1,047,696,985	1,040,000,000	2%	
D 2.1*	Personnel cost	Tk	33,288,803	315,768,717	384,522,985	300,000,000	-26%	!
D 2.2	Electricity cost	Tk	37,863,000	379,851,000	420,229,000	500,000,000	9%	
D 2.3	Chemicals	Tk	8,758,000	37,572,000	60,392,000	100,000,000	55%	++
D 2.4*	Depreciation	Tk	0	53,133,750	66,148,000	80,000,000	-6%	
D 2.5	Other operating cost	Tk	5,781,000	59,382,000	116,405,000	60,000,000	-19%	
D 2.5.1	Other O & M	Tk	3,845,000	50,465,000	87,769,000	N/A		
D 2.5.2	Capital cost from revenues	Tk	1,936,000	8,917,000	28,636,000	N/A		
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income (Loss)	Tk	37,105,981	217,214,717	28,083,258	215,000,000	21%	
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	835,550,469	N/A	730,082,144	75,000,000	-1014%	!
D 6.1*	Accounts receivable from Government	Tk	174,852,387	N/A	134,213,003	15,000,000	-1066%	!
D 6.2*	Accounts receivable from Private	Tk	660,698,082	N/A	595,869,141	60,000,000	-1001%	!
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	0.68	0.74	0.89	0.90	18%	
D 9*	Collection period	Day	264	284	288	180	-58%	!

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E) Water Supply								
E 3	Capacity of Surface WTP (Mohora+Sk.H.WTP+Moduna Gh	MLD	323	N/A	233	310	4%	
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	-1%	
E 5	Deep Tube Wells in Operation	Nos.	40	N/A	76	38	5%	
E 6*	Capacity of DTW - direct distribution	MLD	40	N/A	28	4	896%	++
E 7*	Capacity of DTW - supply to GWTP	MLD	8	N/A	42	41	-80%	!
E 8*	Capacity of distributable water production	MLD	430	N/A	329	382	13%	
E 9	Length of Pipeline	km	768	N/A	766	920	-17%	
E 15*	Production (distributable water)	ML	10,597	97,610	104,146	105,000	12%	
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	8.09	8.66	10.06	9.90	13%	
E 17*	Non Revenue Water	%	30	24	25	20	-20%	
E 18*	Leakage occurrence	No./km/mth	0.55	0.55	0.43	0.52	-5%	
E 19	Water quality sample	No./month	95	950	1,080	1,140	-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%	
F) Personnel								
F 1	No. of permanent employees (Total)	Nos.	687	N/A	705	813	15%	
F 1.1	Grade-3-9	Nos.	64	N/A	69	N/A	N/A	++
F 1.2	Grade-10-11	Nos.	57	N/A	49	N/A	N/A	++
F 1.3	Grade-12-16	Nos.	309	N/A	317	N/A	N/A	++
F 1.4	Grade-17-20	Nos.	257	N/A	270	N/A	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)	Nos.	0	N/A	0	0	N/A	++
F 5.3	Project staff (hired by project budget)	Nos.	32	N/A	32	N/A	N/A	++
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	10.0	N/A	10.9	10.0	0%	
F 3	Average Monthly Salary	Tk	24,347	N/A	16,208	26,000	6%	
F 4*	% of Overtime to Basic Salary	%	40	N/A	42	35	-13%	
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	398	3,228	4,057	5,000	-23%	
G 1.2	Service Connection given	Nos.	360	3,059	3,846	4,000	-8%	
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	340	3,350	3,551	4,500	11%	
G 2.2	Complaints acted on	Nos.	320	2,988	2,845	3,500	-2%	
G 3	Leakage complaints received and attended	Nos.	419	4,189	3,942	4,000	-26%	!

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)/((Dstributable 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.