Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
July 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**	%	**25**	**25**	**28**	**25**	**0%**	
C 4*	**Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthl**	%	**127**	**127**	**83**	**108**	**18%**	
D 9*	**Collection period**	Day	**305**	**299**	**324**	**263**	**-14%**	
F 2*	**No. of perma. employee per 1000 connections(excl. non-perma. Em**	Nos.	**9.1**	**N/A**	**9.1**	**10.0**	**9%**	
D 8*	**Operating Ratio**	Ratio	**0.52**	**0.52**	**0.86**	**0.98**	**47%**	++
A 3.5*	**Functioning meter rate of installed meter**	%	**86**	**N/A**	**87**	**100**	**-14%**	
E 19	**Water quality sample**	No./month	**150**	**150**	**1,200**	**150**	**0%**	
E 18*	**Leakage occurrence**	No./km/mth	**0.32**	**0.32**	**0.43**	**0.50**	**35%**	++
A 6*	**Water supply coverage**	%	**56**	**N/A**	**57**	**75**	**-25%**	!
B 5*	**Average tariff**	Tk/m3	**13.05**	**13.05**	**12.97**	**12.63**	**3%**	
E 16*	**Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)**	Tk/m3	**8.62**	**8.62**	**10.55**	**13.44**	**36%**	++
A) Connection data								
A 1	Total registered connections	Nos.	77,816	N/A	77,794	82,000	-5%	
A 1.1	Billable (non-disconnected) connection	Nos.	72,185	N/A	72,163	76,000	-5%	
A 1.2	Non-billable (disconnected) connection	Nos.	5,631	N/A	5,631	6000	6%	
A 1.3	Billed connection	Nos.	69,551	N/A	69,370	73,000	-5%	
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	28%	++
A 3	Breakdown of billable connection (by meter status)							
A 3.1	Metered	Nos.	62,172	N/A	62,294	66,000	-6%	
A 3.2	Average reading	Nos.	9,746	N/A	9,603	10,000	3%	
A 3.3	Non meter	Nos.	267	N/A	266	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	%	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	%	56	N/A	57	75	-25%	!
A 7	Bill sent-out ratio	%	96	N/A	96	100	-4%	

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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	13.05	13.05	12.97	12.63	3%	
C) Billing and Collection								
C 1	Total billing	Tk	109,126,470	109,126,470	1,199,365,227	1,572,449,000	-17%	
C 1.1*	Private	Tk	93,687,694	93,687,694	1,022,107,233	1,140,313,000	-1%	
C 1.2*	Government	Tk	15,438,776	15,438,776	177,257,994	432,136,000	-57%	!
C 2	Billed volume (Total Volume Accounted)	ML	8,364	8,364	92,471	124,480	-19%	
C 3	Total collection	Tk	138,924,694	138,924,694	999,936,576	1,700,275,000	-2%	
C 3.1*	Private	Tk	116,576,983	116,576,983	904,252,954	1,429,446,000	-2%	
C 3.2*	Government	Tk	22,347,711	22,347,711	95,683,622	270,829,000	-1%	
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	127	127	83	108	18%	
C 4.1*	Private	%	124	124	88	125	-1%	
C 4.2*	Government	%	145	145	54	63	131%	++
D) Financial data								
D 1	Revenue (Total)	Tk	160,492,965	160,492,965	1,247,632,906	2,237,451,000	-14%	
D 1.1	Water revenue	Tk	138,924,694	138,924,694	999,936,576	1,700,275,000	-2%	
D 1.2*	Tubewell license	Tk	7,119,980	7,119,980	88,080,389	90,000,000	-5%	
D 1.3*	Other operating revenues	Tk	6,531,624	6,531,624	64,615,941	352,176,000	-78%	!
D 1.4*	Interest income	Tk	7,916,667	7,916,667	95,000,000	95,000,000	0%	
D 2	Expenses (Total)	Tk	96,072,387	96,072,387	1,357,711,024	2,230,253,000	48%	++
D 2.1*	Personnel cost	Tk	34,131,387	34,131,387	421,236,024	512,607,000	20%	
D 2.2	Electricity cost	Tk	44,543,000	44,543,000	493,984,000	703,000,000	24%	
D 2.3	Chemicals	Tk	1,289,000	1,289,000	67,887,000	140,000,000	89%	++
D 2.4*	Depreciation	Tk	0	0	90,200,000	101,204,000	100%	++
D 2.5	Other operating cost	Tk	16,109,000	16,109,000	284,404,000	773,442,000	75%	++
D 2.5.1	Other O & M	Tk	2,805,000	2,805,000	91,126,000	143,702,000	77%	++
D 2.5.2	Capital cost from revenues	Tk	13,304,000	13,304,000	193,278,000	629,740,000	75%	++
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income (Loss)	Tk	64,420,578	64,420,578	(110,078,118)	7,198,000	10640%	++
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	1,072,071,377	N/A	1,065,256,836	1,065,256,836	-1%	
D 6.1*	Accounts receivable from Government	Tk	217,554,687	N/A	211,109,539	211,109,539	-3%	
D 6.2*	Accounts receivable from Private	Tk	854,516,690	N/A	854,147,297	854,147,297	0%	
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	0.52	0.52	0.86	0.98	47%	++
D 9*	Collection period	Day	305	299	324	263	-14%	

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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%	
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	-1%	
E 5	Deep Tube Wells in Operation	Nos.	44	N/A	42	44	0%	
E 6*	Capacity of DTW - direct distribution	MLD	37	N/A	38	40	-7%	
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	428	N/A	428	430	-1%	
E 9	Length of Pipeline	km	770	N/A	770	920	-16%	
E 15*	Production (distributable water)	ML	11,145	11,145	128,662	165,970	-19%	
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	8.62	8.62	10.55	13.44	36%	++
E 17*	Non Revenue Water	%	25	25	28	25	0%	
E 18*	Leakage occurrence	No./km/mth	0.32	0.32	0.43	0.50	35%	++
E 19	Water quality sample	No./month	150	150	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!	#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	170	N/A	++
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	9.1	N/A	9.1	10.0	9%	
F 3	Average Monthly Salary	Tk	24,655	N/A	17,366	19,960	-24%	
F 4*	% of Overtime to Basic Salary	%	74	N/A	15	32	-130%	!
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	394	394	4,305	6,000	-21%	
G 1.2	Service Connection given	Nos.	377	377	3,745	5,000	-10%	
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	180	180	2,115	4,500	52%	++
G 2.2	Complaints acted on	Nos.	140	140	1,854	3,500	52%	++
G 3	Leakage complaints received and attended	Nos.	249	249	3,993	5,000	40%	++

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.