Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
December 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**	%	**21**	**22**	**28**	**25**	**12%**	
C 4*	**Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthl**	%	**91**	**95**	**83**	**108**	**-16%**	
D 9*	**Collection period**	Day	**310**	**308**	**324**	**263**	**-17%**	
F 2*	**No. of perma. employee per 1000 connections(excl. non-perma. Em**	Nos.	**8.8**	**N/A**	**9.1**	**10.0**	**12%**	
D 8*	**Operating Ratio**	Ratio	**0.71**	**0.67**	**0.86**	**0.98**	**31%**	++
A 3.5*	**Functioning meter rate of installed meter**	%	**90**	**N/A**	**87**	**100**	**-10%**	
E 19	**Water quality sample**	No./month	**150**	**900**	**1,200**	**150**	**0%**	
E 18*	**Leakage occurrence**	No./km/mth	**0.50**	**0.40**	**0.43**	**0.50**	**21%**	
A 6*	**Water supply coverage**	%	**58**	**N/A**	**57**	**75**	**-23%**	
B 5*	**Average tariff**	Tk/m3	**14.10**	**13.92**	**12.97**	**12.63**	**12%**	
E 16*	**Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)**	Tk/m3	**10.94**	**10.33**	**10.55**	**13.44**	**23%**	
A) Connection data								
A 1	Total registered connections	Nos.	80,409	N/A	77,794	82,000	-2%	
A 1.1	Billable (non-disconnected) connection	Nos.	74,738	N/A	72,163	76,000	-2%	
A 1.2	Non-billable (disconnected) connection	Nos.	5,671	N/A	5,631	6000	5%	
A 1.3	Billed connection	Nos.	71,827	N/A	69,370	73,000	-2%	
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	32%	++
A 3	Breakdown of billable connection (by meter status)							
A 3.1	Metered	Nos.	66,723	N/A	62,294	66,000	1%	
A 3.2	Average reading	Nos.	7,761	N/A	9,603	10,000	22%	
A 3.3	Non meter	Nos.	254	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	%	90	N/A	87	100	-10%	
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	%	58	N/A	57	75	-23%	
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	14.10	13.92	12.97	12.63	12%	
C) Billing and Collection								
C 1	Total billing	Tk	119,900,285	709,322,764	1,199,365,227	1,572,449,000	-10%	
C 1.1*	Private	Tk	104,789,116	612,553,483	1,022,107,233	1,140,313,000	7%	
C 1.2*	Government	Tk	15,111,169	96,769,281	177,257,994	432,136,000	-55%	!
C 2	Billed volume (Total Volume Accounted)	ML	8,504	50,974	92,471	124,480	-18%	
C 3	Total collection	Tk	109,249,328	676,718,711	999,936,576	1,700,275,000	-20%	
C 3.1*	Private	Tk	99,944,391	571,132,616	904,252,954	1,429,446,000	-20%	
C 3.2*	Government	Tk	9,304,937	105,586,095	95,683,622	270,829,000	-22%	
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	91	95	83	108	-16%	
C 4.1*	Private	%	95	93	88	125	-24%	
C 4.2*	Government	%	62	109	54	63	-2%	
D) Financial data								
D 1	Revenue (Total)	Tk	127,292,419	804,568,361	1,247,632,906	2,237,451,000	-28%	!
D 1.1	Water revenue	Tk	109,249,328	676,718,711	999,936,576	1,700,275,000	-20%	
D 1.2*	Tubewell license	Tk	4,149,162	29,110,020	88,080,389	90,000,000	-35%	!
D 1.3*	Other operating revenues	Tk	5,977,262	51,239,630	64,615,941	352,176,000	-71%	!
D 1.4*	Interest income	Tk	7,916,667	47,500,000	95,000,000	95,000,000	0%	
D 2	Expenses (Total)	Tk	118,363,079	674,355,757	1,357,711,024	2,230,253,000	40%	++
D 2.1*	Personnel cost	Tk	31,014,079	207,939,757	421,236,024	512,607,000	19%	
D 2.2	Electricity cost	Tk	39,996,000	264,025,000	493,984,000	703,000,000	25%	
D 2.3	Chemicals	Tk	12,755,000	41,253,000	67,887,000	140,000,000	41%	++
D 2.4*	Depreciation	Tk	25,301,000	50,602,000	90,200,000	101,204,000	87%	++
D 2.5	Other operating cost	Tk	9,297,000	110,536,000	284,404,000	773,442,000	71%	++
D 2.5.1	Other O & M	Tk	7,088,000	29,740,000	91,126,000	143,702,000	59%	++
D 2.5.2	Capital cost from revenues	Tk	2,209,000	80,796,000	193,278,000	629,740,000	74%	++
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income (Loss)	Tk	8,929,340	130,212,604	(110,078,118)	7,198,000	3518%	++
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	1,197,691,633	N/A	1,065,256,836	1,065,256,836	-12%	
D 6.1*	Accounts receivable from Government	Tk	263,198,670	N/A	211,109,539	211,109,539	-25%	
D 6.2*	Accounts receivable from Private	Tk	934,492,963	N/A	854,147,297	854,147,297	-9%	
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	0.71	0.67	0.86	0.98	31%	++
D 9*	Collection period	Day	310	308	324	263	-17%	

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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.	48	N/A	42	44	9%	
E 6*	Capacity of DTW - direct distribution	MLD	36	N/A	38	40	-9%	
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	427	N/A	428	430	-1%	
E 9	Length of Pipeline	km	770	N/A	770	920	-16%	
E 15*	Production (distributable water)	ML	10,817.5	65,270	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	10.94	10.33	10.55	13.44	23%	
E 17*	Non Revenue Water	%	21	22	28	25	12%	
E 18*	Leakage occurrence	No./km/mth	0.50	0.40	0.43	0.50	21%	
E 19	Water quality sample	No./month	150	900	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.	654	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.	293	N/A	291	315	N/A	++
F 1.4	Grade-17-20	Nos.	248	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.	41	N/A	32	170	N/A	++
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	8.8	N/A	9.1	10.0	12%	
F 3	Average Monthly Salary	Tk	26,345	N/A	17,366	19,960	-32%	!
F 4*	% of Overtime to Basic Salary	%	41	N/A	15	32	-28%	!
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	422	2,624	4,305	6,000	-13%	
G 1.2	Service Connection given	Nos.	357	2,248	3,745	5,000	-10%	
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	200	1,150	2,115	4,500	49%	++
G 2.2	Complaints acted on	Nos.	160	910	1,854	3,500	48%	++
G 3	Leakage complaints received and attended	Nos.	386	1,830	3,993	5,000	27%	++

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.