Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
May 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**	%	31	28	25	20	-40%	!
C 4*	**Revenue collection efficiency(monthly coll.+outstand. Coll.)/month**	%	47	75	92	114	-59%	!
D 9*	**Collection period**	Day	304	320	289	263	-22%	
F 2*	**No. of perma. employee per 1000 connections(excl. non-perma. En**	Nos.	9.2	N/A	10.0	10.0	8%	
D 8*	**Operating Ratio**	Ratio	1.41	0.93	0.81	0.98	5%	
A 3.5*	**Functioning meter rate of installed meter**	%	87	N/A	84	100	-13%	
E 19	**Water quality sample**	No./month	100	1,100	1,140	95	5%	
E 18*	**Leakage occurrence**	No./km/mth	0.24	0.45	0.55	0.50	11%	
A 6*	**Water supply coverage**	%	57	N/A	57	75	-24%	
B 5*	**Average tariff**	Tk/m3	13.85	12.80	12.13	12.33	12%	
E 16*	**Unit production cost (In/c Capt. Cost,Deprec. & Financial Expense.**	Tk/m3	7.72	9.11	9.93	13.56	33%	++
A Connection data								
A 1	Total registered connections	Nos.	77,623	N/A	74,330	79,000	-2%	
A 1.1	Billable (non-disconnected) connection	Nos.	72,002	N/A	68,798	73,000	-1%	
A 1.2	Non-billable (disconnected) connection	Nos.	5,621	N/A	5,532	6000	6%	
A 1.3	Billed connection	Nos.	69,149	N/A	67,027	72,000	-4%	
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	27%	++
A 3	Breakdown of billable connection (by meter status)							
A 3.1	Metered	Nos.	62,215	N/A	57,885	61,500	1%	
A 3.2	Average reading	Nos.	9,521	N/A	10,635	11,500	17%	
A 3.3	Non meter	Nos.	266	N/A	278	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	%	87	N/A	84	100	-13%	
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	%	96	N/A	97	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	9.92	10.42	19%	
B 2	Non-domestic	Tk/m3	30.30	N/A	27.56	28.94	5%	
B 3	Street Hydrant	Tk/m3	12.40	N/A	9.92	10.42	19%	
B 4	Religious Institutions	Tk/m3	12.40	N/A	9.92	10.42	19%	
B 5*	Average tariff	Tk/m3	13.85	12.80	12.13	12.33	12%	
C. Billing and Collection								
C 1	Total billing	Tk	105,907,770	1,087,626,182	1,087,980,059	1,181,809,000	0%	
C 1.1*	Private	Tk	89,817,473	928,125,617	930,097,500	857,062,000	18%	
C 1.2*	Government	Tk	16,090,297	159,500,565	157,882,559	324,747,000	-46%	!
C 2	Billed volume	ML	7,646	84,947	89,712	95,810	-3%	
C 3	Total collection	Tk	49,680,886	815,319,324	996,216,692	1,350,000,000	-34%	!
C 3.1*	Private	Tk	45,918,918	734,972,978	897,774,626	1,134,949,744	-29%	!
C 3.2*	Government	Tk	3,761,968	80,346,346	98,442,066	215,050,256	-59%	!
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	47	75	92	114	-59%	!
C 4.1*	Private	%	51	79	97	132	-61%	!
C 4.2*	Government	%	23	50	62	66	-65%	!
D. Financial data								
D 1	Revenue (Total)	Tk	60,768,460	1,035,519,721	1,274,507,887	1,776,511,000	-36%	!
D 1.1	Water revenue	Tk	49,680,886	815,319,324	996,216,692	1,350,000,000	-34%	!
D 1.2*	Tubewell license	Tk	2,159,576	73,605,917	122,330,008	90,000,000	-11%	
D 1.3*	Other operating revenues	Tk	1,011,331	59,511,147	60,961,187	241,511,000	-73%	!
D 1.4*	Interest income	Tk	7,916,667	87,083,333	95,000,000	95,000,000	0%	
D 2	Expenses (Total)	Tk	85,998,643	1,073,784,833	1,183,745,705	1,732,312,000	32%	++
D 2.1*	Personnel cost	Tk	37,642,643	392,771,833	401,499,705	505,395,000	15%	
D 2.2	Electricity cost	Tk	43,743,000	452,456,000	469,924,000	540,000,000	9%	
D 2.3	Chemicals	Tk	330,000	52,129,000	60,527,000	120,000,000	53%	++
D 2.4*	Depreciation	Tk	0	67,650,000	70,845,000	90,200,000	85%	++
D 2.5	Other operating cost	Tk	4,283,000	108,778,000	180,950,000	476,717,000	75%	++
D 2.5.1	Other O & M	Tk	4,173,000	64,328,000	101,870,000	144177000	51%	++
D 2.5.2	Capital cost from revenues	Tk	110,000	44,450,000	79,080,000	332540000	85%	++
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income (Loss)	Tk	(25,230,183)	(38,265,112)	90,762,182	44,199,000	-194%	!
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	1,038,970,789	N/A	861,727,215	861,727,215	-21%	
D 6.1*	Accounts receivable from Government	Tk	206,383,096	N/A	178,400,051	178,400,051	-16%	
D 6.2*	Accounts receivable from Private	Tk	832,587,693	N/A	683,327,164	683,327,164	-22%	
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	1.41	0.93	0.81	0.98	5%	
D 9*	Collection period	Day	304	320	289	263	-22%	

		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%	
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	-1%	
E 5	Deep Tube Wells in Operation	Nos.	38	N/A	41	41	-7%	
E 6*	Capacity of DTW - direct distribution	MLD	38	N/A	40	40	-5%	
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	429	N/A	430	430	0%	
E 9	Length of Pipeline	km	770	N/A	768	800	-4%	
E 15*	Production (distributable water)	ML	11,147	117,837	119,197	127,750	1%	
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	7.72	9.11	9.93	13.56	33%	++
E 17*	Non Revenue Water	%	31	28	25	20	-40%	!
E 18*	Leakage occurrence	No./km/mth	0.24	0.45	0.55	0.50	11%	
E 19	Water quality sample	No./month	100	1,100	1,140	95	5%	
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.	660	N/A	687	730	10%	
F 1.1	Grade-3-9	Nos.	57	N/A	64	70	N/A	++
F 1.2	Grade-10-11	Nos.	56	N/A	57	60	N/A	++
F 1.3	Grade-12-16	Nos.	294	N/A	309	315	N/A	++
F 1.4	Grade-17-20	Nos.	253	N/A	257	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.	9.2	N/A	10.0	10.0	8%	
F 3	Average Monthly Salary	Tk	19,161	N/A	15,227	19,960	4%	
F 4*	% of Overtime to Basic Salary	%	21	N/A	16	32	34%	++
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	43	4,019	4,701	6,000	-27%	!
G 1.2	Service Connection given	Nos.	65	3,531	4,280	5,000	-23%	
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	30	1,965	4,120	4,500	52%	++
G 2.2	Complaints acted on	Nos.	20	1,734	3,718	3,500	46%	++
G 3	Leakage complaints received and attended	Nos.	187	3,770	5,072	5,000	18%	

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.
D8.1: Same as C1.1
D8.2: 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.

Prepared by:		Submitted by:	Noted by:	
12.08.2020 SAE	AE	XEN	12/8/2020 SE (P&C)	CE	26/08/2020 DMD (E)