

Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
October 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	%	26	27	25	20	-34%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	87	89	92	114	-24%	
D 9* Collection period	Day	298	298	289	263	-13%	
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Em	Nos.	9.7	N/A	10.0	10.0	3%	
D 8* Operating Ratio	Ratio	0.99	0.87	0.81	0.98	11%	
A 3.5* Functioning meter rate of installed meter	%	85	N/A	84	100	-15%	
E 19 Water quality sample	No./month	95	380	1,140	95	0%	
E 18* Leakage occurrence	No./km/mth	0.49	0.44	0.55	0.50	12%	
A 6* Water supply coverage	%	56	N/A	57	75	-25%	
B 5* Average tariff	Tk/m3	12.27	12.28	12.13	12.33	-1%	
E 16* Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	9.63	8.91	9.93	13.56	34%	++
A) Connection data							
A 1 Total registered connections	Nos.	75,722	N/A	74,330	79,000	-4%	
A 1.1 Billable (non-disconnected) connection	Nos.	70,163	N/A	68,798	73,000	-4%	
A 1.2 Non-billable (disconnected) connection	Nos.	5,559	N/A	5,532	6000	7%	
A 1.3 Billed connection	Nos.	68,122	N/A	67,027	72,000	-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	22%	
A 3 Breakdown of billable connection (by meter status)							
A 3.1 Metered	Nos.	59,482	N/A	57,885	61,500	-3%	
A 3.2 Average reading	Nos.	10,409	N/A	10,635	11,500	9%	
A 3.3 Non meter	Nos.	272	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	%	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	%	56	N/A	57	75	-25%	
A 7 Bill sent-out ratio	%	97	N/A	97	100	-3%	

		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	9.92	N/A	9.92	10.42	-5%	
B 2	Non-domestic	Tk/m3	27.56	N/A	27.56	28.94	-5%	
B 3	Street Hydrant	Tk/m3	9.92	N/A	9.92	10.42	-5%	
B 4	Religious Institutions	Tk/m3	9.92	N/A	9.92	10.42	-5%	
B 5*	Average tariff	Tk/m3	12.27	12.28	12.13	12.33	-1%	
C) Billing and Collection								
C 1	Total billing	Tk	98,627,462	386,946,580	1,087,980,059	1,181,809,000	-2%	
C 1.1*	Private	Tk	83,587,807	331,461,666	930,097,500	857,062,000	16%	
C 1.2*	Government	Tk	15,039,655	55,484,914	157,882,559	324,747,000	-49%	!
C 2	Billed volume	ML	8,037	31,519	89,712	95,810	-1%	
C 3	Total collection	Tk	86,128,128	345,074,038	996,216,692	1,350,000,000	-23%	
C 3.1*	Private	Tk	78,657,343	307,424,415	897,774,626	1,134,949,744	-19%	
C 3.2*	Government	Tk	7,470,785	37,649,623	98,442,066	215,050,256	-47%	!
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	87	89	92	114	-24%	
C 4.1*	Private	%	94	93	97	132	-29%	!
C 4.2*	Government	%	50	68	62	66	-25%	
D) Financial data								
D 1	Revenue (Total)	Tk	105,255,903	413,196,212	1,274,507,887	1,776,511,000	-30%	!
D 1.1	Water revenue	Tk	86,128,128	345,074,038	996,216,692	1,350,000,000	-23%	
D 1.2*	Tubewell license	Tk	3,824,213	14,781,406	122,330,008	90,000,000	-51%	!
D 1.3*	Other operating revenues	Tk	7,386,895	21,674,101	60,961,187	241,511,000	-73%	!
D 1.4*	Interest income	Tk	7,916,667	31,666,667	95,000,000	95,000,000	0%	
D 2	Expenses (Total)	Tk	104,444,834	383,630,859	1,183,745,705	1,732,312,000	34%	++
D 2.1*	Personnel cost	Tk	47,867,834	157,382,859	401,499,705	505,395,000	7%	
D 2.2	Electricity cost	Tk	39,863,000	163,570,000	469,924,000	540,000,000	9%	
D 2.3	Chemicals	Tk	8,397,000	21,461,000	60,527,000	120,000,000	46%	++
D 2.4*	Depreciation	Tk	0	22,550,000	70,845,000	90,200,000	86%	++
D 2.5	Other operating cost	Tk	8,317,000	18,667,000	180,950,000	476,717,000	88%	++
D 2.5.1	Other O & M	Tk	8,208,000	17,734,000	101,870,000	144177000	63%	++
D 2.5.2	Capital cost from revenues	Tk	109,000	933,000	79,080,000	332540000	99%	++
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income (Loss)	Tk	811,069	29,565,353	90,762,182	44,199,000	101%	++
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	949,114,373	N/A	861,727,215	861,727,215	-10%	
D 6.1*	Accounts receivable from Government	Tk	212,190,316	N/A	178,400,051	178,400,051	-19%	
D 6.2*	Accounts receivable from Private	Tk	736,924,057	N/A	683,327,164	683,327,164	-8%	
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	0.99	0.87	0.81	0.98	11%	
D 9*	Collection period	Day	298	298	289	263	-13%	

		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.	37	N/A	41	41	-10%	
E 6*	Capacity of DTW - direct distribution	MLD	35	N/A	40	40	-13%	
E 7*	Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!	
E 8*	Capacity of distributable water production	MLD	425	N/A	430	430	-1%	
E 9	Length of Pipeline	km	769	N/A	768	800	-4%	
E 15*	Production (distributable water)	ML	10,849	43,056	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	9.63	8.91	9.93	13.56	34%	
E 17*	Non Revenue Water	%	26	27	25	20	-34%	
E 18*	Leakage occurrence	No./km/mth	0.49	0.44	0.55	0.50	12%	
E 19	Water quality sample	No./month	95	380	1,140	95	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.	683	N/A	687	730	6%	++ !
F 1.1	Grade-3-9	Nos.	62	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.	311	N/A	309	315	N/A	
F 1.4	Grade-17-20	Nos.	254	N/A	257	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.	32	N/A	32	170	N/A	
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	9.7	N/A	10.0	10.0	3%	
F 3	Average Monthly Salary	Tk	24,993	N/A	15,227	19,960	-25%	
F 4*	% of Overtime to Basic Salary	%	44	N/A	16	32	-38%	!
G) Customer Services								
G 1	New Service Connection							! !
G 1.1	Service Connection Application Received	Nos.	534	1,301	4,701	6,000	-35%	
G 1.2	Service Connection given	Nos.	402	1,109	4,280	5,000	-33%	++ ++
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	250	857	4,120	4,500	43%	
G 2.2	Complaints acted on	Nos.	220	804	3,718	3,500	31%	
G 3	Leakage complaints received and attended	Nos.	378	1,349	5,072	5,000	19%	

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 = $1 - (\text{number of non-meter connection} / \text{number of billable connection})$.

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.