

Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
September 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	%	25	27	25	20	-35%	!
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll./month)	%	86	90	92	114	-25%	
D 9*	Collection period	Day	281	290	289	263	-10%	
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Em)	Nos.	9.8	N/A	10.0	10.0	2%	
D 8*	Operating Ratio	Ratio	0.88	0.83	0.81	0.98	15%	
A 3.5*	Functioning meter rate of installed meter	%	85	N/A	84	100	-15%	
E 19	Water quality sample	No./month	95	285	1,140	95	0%	
E 18*	Leakage occurrence	No./km/mtr	0.47	0.42	0.55	0.50	16%	
A 6*	Water supply coverage	%	56	N/A	57	75	-25%	‡
B 5*	Average tariff	Tk/m3	12.39	12.28	12.13	12.33	0%	
E 16*	Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	10.70	8.67	9.93	13.56	36%	++
A) Connection data								
A 1	Total registered connections	Nos.	75,566	N/A	74,330	79,000	-4%	
A 1.1	Billable (non-disconnected) connection	Nos.	70,031	N/A	68,798	73,000	-4%	
A 1.2	Non-billable (disconnected) connection	Nos.	5,535	N/A	5,532	6000	8%	
A 1.3	Billed connection	Nos.	67,849	N/A	67,027	72,000	-6%	
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	20%	
A 3	Breakdown of billable connection (by meter status)							
A 3.1	Metered	Nos.	58,978	N/A	57,885	61,500	-4%	
A 3.2	Average reading	Nos.	10,779	N/A	10,635	11,500	6%	
A 3.3	Non meter	Nos.	274	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%	

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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	12.39	12.28	12.13	12.33	0%	
C) Billing and Collection								
C 1	Total billing	Tk	97,806,174	288,319,118	1,087,980,059	1,181,809,000	-2%	
C 1.1*	Private	Tk	83,756,252	247,873,859	930,097,500	857,062,000	16%	
C 1.2*	Government	Tk	14,049,922	40,445,259	157,882,559	324,747,000	-50%	!
C 2	Billed volume	ML	7,895	23,482	89,712	95,810	-2%	
C 3	Total collection	Tk	84,350,445	258,945,910	996,216,692	1,350,000,000	-23%	
C 3.1*	Private	Tk	77,542,892	228,767,072	897,774,626	1,134,949,744	-19%	
C 3.2*	Government	Tk	6,807,553	30,178,838	98,442,066	215,050,256	-44%	!
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	86	90	92	114	-25%	
C 4.1*	Private	%	93	92	97	132	-30%	!
C 4.2*	Government	%	48	75	62	66	-27%	!
D) Financial data								
D 1	Revenue (Total)	Tk	101,755,069	307,940,309	1,274,507,887	1,776,511,000	-31%	!
D 1.1	Water revenue	Tk	84,350,445	258,945,910	996,216,692	1,350,000,000	-23%	
D 1.2*	Tubewell license	Tk	4,083,429	10,957,193	122,330,008	90,000,000	-51%	!
D 1.3*	Other operating revenues	Tk	5,404,528	14,287,206	60,961,187	241,511,000	-76%	!
D 1.4*	Interest income	Tk	7,916,667	23,750,000	95,000,000	95,000,000	0%	
D 2	Expenses (Total)	Tk	113,000,304	279,186,025	1,183,745,705	1,732,312,000	36%	++
D 2.1*	Personnel cost	Tk	33,073,304	109,515,025	401,499,705	505,395,000	13%	
D 2.2	Electricity cost	Tk	40,516,000	123,707,000	469,924,000	540,000,000	8%	
D 2.3	Chemicals	Tk	11,876,000	13,064,000	60,527,000	120,000,000	56%	++
D 2.4*	Depreciation	Tk	22,550,000	22,550,000	70,845,000	90,200,000	81%	++
D 2.5	Other operating cost	Tk	4,985,000	10,350,000	180,950,000	476,717,000	91%	++
D 2.5.1	Other O & M	Tk	4,161,000	9,526,000	101,870,000	144177000	74%	++
D 2.5.2	Capital cost from revenues	Tk	824,000	824,000	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	(11,245,235)	28,754,284	90,762,182	44,199,000	160%	++
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	915,414,443	N/A	861,727,215	861,727,215	-6%	
D 6.1*	Accounts receivable from Government	Tk	203,395,994	N/A	178,400,051	178,400,051	-14%	
D 6.2*	Accounts receivable from Private	Tk	712,018,449	N/A	683,327,164	683,327,164	-4%	
D 7*	Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8*	Operating Ratio	Ratio	0.88	0.83	0.81	0.98	15%	
D 9*	Collection period	Day	281	290	289	263	-10%	

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								++ 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.	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!	#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	10,562	32,206	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	10.70	8.67	9.93	13.56	36%	++
E 17*	Non Revenue Water	%	25	27	25	20	-35%	!
E 18*	Leakage occurrence	No./km/mth	0.47	0.42	0.55	0.50	16%	
E 19	Water quality sample	No./month	95	285	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.	688	N/A	687	730	6%	
F 1.1	Grade-3-9	Nos.	64	N/A	64	70	N/A	++
F 1.2	Grade-10-11	Nos.	57	N/A	57	60	N/A	++
F 1.3	Grade-12-16	Nos.	313	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!	#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.	9.8	N/A	10.0	10.0	2%	
F 3	Average Monthly Salary	Tk	24,858	N/A	15,227	19,960	-25%	
F 4*	% of Overtime to Basic Salary	%	49	N/A	16	32	-53%	!
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	321	767	4,701	6,000	-49%	!
G 1.2	Service Connection given	Nos.	255	707	4,280	5,000	-43%	!
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	294	607	4,120	4,500	46%	++
G 2.2	Complaints acted on	Nos.	272	584	3,718	3,500	33%	++
G 3	Leakage complaints received and attended	Nos.	358	971	5,072	5,000	22%	

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).

*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 income

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.

Prepared by:

Submitted by:

Noted by:

SAE

AE

XEN

SE (P&C)

CE

DMD (E)

Total Billing

	Private		Government
Total		Total	0
Vat		Vat	0
Unit Vat		unit Vat	#DIV/0!
Including vat		Including vat	
Vat for private		Vat for Govt.	#DIV/0!
Excluding vat	83398452	Excluding vat	#DIV/0!
Loose Water	357800	Final Amount	14049922
Final amount	83756252		

Total (Excluding Vat) **97806174.00**

Total Collection

	Private		Government
Total	96105659	Total	96105659
Vat	12092014	Vat	12092014
Unit Vat	0.12582	unit Vat	0.12582
Including vat	88318300	Including vat	7787359 96105659
Vat for private	11112208.49	Vat for Govt.	979805.5081 12092014
Excluding vat	77206091.51	Excluding vat	6807553.492 84013645
Street Hydrant	0		
Loose Water	336800	Final Amount	6807553
Final amount	77542892		

Total (Excluding Vat) **84350445.00**

- 3** : Number of months that have passed in this fiscal year.
- 30** : Number of days in September 2019
- 2,304.696** : Aggregation of end-of-month pipeline length in the past months
- 25%** : High end threshold (= too good) to show the warning sign " ++ "
- 25%** : Low end threshold (= very bad) to show the warning sign " ! "

Remarks *3

How to set the target

Business plan

Automatically computed based on other targets

Automatically computed based on other targets

Business plan

Automatically computed based on other targets

Business plan

Business plan

Automatically computed based on NRW target

Business plan

Business plan

Automatically computed based on other targets

Same share as the previous year

Business plan

Set discretionally. This target is set to satisfy the new connection increase target

Automatically computed based on other targets

Same as the previous year

Same as the previous year

Automatically computed based on other targets

Automatically computed based on other targets

Automatically computed based on other targets

Business plan

Business plan

Business plan

Same as the previous year (because no particular policy is presented)

Business plan

Business plan

Jan 2011 estimate

Remarks *3

10% increase is targeted
10% increase is targeted
10% increase is targeted
10% increase is targeted
Business plan

Business plan
Same share as the previous year
Same share as the previous year
Business plan
Business plan
Same share as the previous year
Same share as the previous year
Automatically computed based on other targets
Automatically computed based on other targets
Automatically computed based on other targets

C1 and D1.1 should be the same amount but they are different here. Because C1 data are from computer section.D1.1 come from accounting section. Accounting section's figure is al

Automatically computed based on other targets
Same increase rate as total billing (C1)
Business plan
Business plan
Business plan
Automatically computed based on other targets
Business plan
Business plan
Business plan
Business plan
Business plan

Annually computable

C1 and D1.1 should be the same amount but they are different here. Because C1 data are from computer section.D1.1 come from accounting section. Accounting section's figure is al

Annually computable
Annually computable

Quarterly computable

Business plan
Automatically computed based on other targets
Same as the previous year
Same as the previous year
Business plan
Same share as the previous year
Same share as the previous year
Business plan
Automatically computed based on other targets
Automatically computed based on other targets

Quarterly computable
Annually computable
Annually computable
June 2009 audited data

Annually computable
Annually computable

Remarks *3

Business plan

Business plan

Automatically computed based on other targets

Should be business plan. However as of 21Dec 2011, BP cannot reflect the correct situation (investment plan), thus the actual number of the past year shown in MIS report was used as this year's target.

Should be business plan. However as of 21Dec 2011, BP cannot reflect the correct situation (investment plan), thus the actual number of the past year shown in MIS report was used as this year's target.

Automatically computed based on other targets

Same as the previous year

Business plan

Automatically computed based on other targets

Business plan

Automatically computed based on NRW target

Business plan

Business plan

Business plan

Annually computable

Based on the business plan and the assumption of non-permanent staff

Same share as the previous year

Same share as the previous year

Same share as the previous year

Same share as the previous year

Automatically computed based on other targets

Same as the previous year

Same as the previous year

Same as the previous year

Business plan

Discretionary. Set as the same as the latest available (in this case Sept 2011)

Discretionary.

Same as the previous year

Same as the previous year

Same as the previous year

Same as the previous year

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