

CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY



MANAGEMENT INFORMATION SYSTEM REPORT
FOR THE MONTH OF DECEMBER-2021

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Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
December 2021

	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	%	28	29	25	20	-46%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	94	88	100	90	5%	
D 9* Collection period	Day	294	294	314	263	-12%	
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Em	Nos.	7.8	N/A	8.3	9.4	17%	
D 8* Operating Ratio	Ratio	0.71	0.71	0.69	0.72	2%	
A 3.5* Functioning meter rate of installed meter	%	96	N/A	96	100	-4%	
E 19 Water quality sample	No./month	200	1,200	1,800	200	0%	
E 18* Leakage occurrence	No./km/mtf	0.39	0.41	0.43	0.50	18%	
A 6* Water supply coverage	%	60	N/A	60	75	-20%	
B 5* Average tariff	Tk/m3	13.99	13.96	13.73	14.73	-5%	
E 16* Unit production cost (in/c Capt. Cost, Deprec. & Financial Expense)	Tk/m3	12.65	9.72	11.92	13.56	28%	++
A) Connection data							
A 1 Total registered connections	Nos.	83,891	N/A	82,576	84,000	0%	
A 1.1 Billable (non-disconnected) connection	Nos.	78,119	N/A	76,849	78,000	0%	
A 1.2 Non-billable (disconnected) connection	Nos.	5,772	N/A	5,727	6000	4%	
A 1.3 Billed connection	Nos.	76,461	N/A	73,970	75,000	2%	
A 2 Breakdown of billable connection (by customer type)							
A 2.1* Domestic	%	93	N/A	97	96	-3%	
A 2.2 Non-domestic	%	7	N/A	3	4	-75%	!
A 3 Breakdown of billable connection (by meter status)							
A 3.1 Metered	Nos.	74,731	N/A	74,039	74,000	1%	
A 3.2 Average reading	Nos.	3,282	N/A	2,702	4,000	18%	
A 3.3 Non meter	Nos.	106	N/A	108	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	%	96	N/A	96	100	-4%	
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	%	60	N/A	60	75	-20%	
A 7 Bill sent-out ratio	%	98	N/A	96	100	-2%	

	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							
B 2 Non-domestic	Tk/m3	12.40	N/A	12.40	13.02	-5%	
B 3 Street Hydrant	Tk/m3	30.30	N/A	30.30	31.82	-5%	
B 4 Religious Institutions	Tk/m3	12.40	N/A	12.40	13.02	-5%	
B 5* Average tariff	Tk/m3	12.40	N/A	12.40	13.02	-5%	
C) Billing and Collection							
C 1 Total billing	Tk	136,970,885	807,092,663	1,423,705,665	1,806,119,000	-11%	
C 1.1* Private	Tk	118,892,324	694,001,318	1,229,454,669	1,310,119,000	6%	
C 1.2* Government	Tk	18,078,561	113,091,345	194,250,996	496,000,000	-54%	!
C 2 Billed volume (Total Volume Accounted)	ML	9,790	57,803	103,690	122,640	-6%	
C 3 Total collection	Tk	128,885,244	706,813,318	1,417,998,870	1,623,619,000	-13%	
C 3.1* Private	Tk	121,275,318	641,246,904	1,245,465,366	1,365,119,000	-6%	
C 3.2* Government	Tk	7,609,926	65,566,414	172,533,504	258,500,000	-49%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	94	88	100	90	5%	
C 4.1* Private	%	102	92	101	104	-2%	
C 4.2* Government	%	42	58	89	52	-19%	
D) Financial data							
D 1 Revenue (Total)	Tk	147,754,236	813,513,362	1,736,502,206	2,149,619,000	-24%	
D 1.1 Water revenue	Tk	128,885,244	706,813,318	1,417,998,870	1,623,619,000	-13%	
D 1.2* Tubewell license	Tk	3,001,924	20,172,451	126,672,332	90,000,000	-55%	!
D 1.3* Other operating revenues	Tk	7,533,735	36,527,593	96,831,004	336,000,000	-78%	!
D 1.4* Interest income	Tk	8,333,333	50,000,000	95,000,000	100,000,000	0%	
D 2 Expenses (Total)	Tk	172,337,897	792,731,234	1,653,696,147	2,078,403,000	24%	
D 2.1* Personnel cost	Tk	30,542,647	207,808,734	422,685,147	528,784,000	21%	
D 2.2 Electricity cost	Tk	56,139,000	307,767,000	564,704,000	703,000,000	12%	
D 2.3 Chemicals	Tk	7,463,000	26,454,000	91,434,000	140,000,000	62%	++
D 2.4* Depreciation	Tk	46,980,250	93,960,500	101,204,000	187,921,000	64%	++
D 2.5 Other operating cost	Tk	31,213,000	156,741,000	473,669,000	518,698,000	40%	++
D 2.5.1 Other O & M	Tk	11,357,000	37,323,000	111,358,000	185,908,000	60%	++
D 2.5.2 Capital cost from revenues	Tk	19,856,000	119,418,000	362,311,000	332,790,000	28%	++
D 2.6* Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3 Net Income (Loss)	Tk	(24,583,661)	20,782,128	82,806,059	71,216,000	-42%	!
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	1,298,025,283	N/A	1,223,432,356	1,223,432,356	-6%	
D 6.1* Accounts receivable from Government	Tk	261,328,297	N/A	252,100,239	252,100,239	-4%	
D 6.2* Accounts receivable from Private	Tk	1,036,696,986	N/A	971,332,117	971,332,117	-7%	
D 7* Long term loans	Tk	0	N/A	0	0	#DIV/0!	#DIV/0!
D 8* Operating Ratio	Ratio	0.71	0.71	0.69	0.72	2%	
D 9* Collection period	Day	294	294	314	263	-12%	

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3
E) Water Supply							++ Too good ! Very bad
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.	57	N/A	60	44	30%	++
E 6* Capacity of DTW - direct distribution	MLD	61	N/A	59	40	53%	++
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	452	N/A	449	430	5%	
E 9 Length of Pipeline	km	962	N/A	770	1,037	-7%	
E 15* Production (distributable water)	ML	13,618.78	81,554	138,687	153,300	6%	
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	12.65	9.72	11.92	13.56	28%	++
E 17* Non Revenue Water	%	28	29	25	20	-46%	!
E 18* Leakage occurrence	No./km/mth	0.39	0.41	0.43	0.50	18%	
E 19 Water quality sample	No./month	200	1,200	1,800	200	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.	609	N/A	635	732	17%	
F 1.1 Grade-3-9	Nos.	51	N/A	57	60	N/A	++
F 1.2 Grade-10-11	Nos.	52	N/A	52	62	N/A	++
F 1.3 Grade-12-16	Nos.	263	N/A	280	300	N/A	++
F 1.4 Grade-17-20	Nos.	243	N/A	246	310	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) Outsource in	Nos.	0	N/A	0	200	N/A	++
F 5.3 Project staff (hired by project budget)	Nos.	50	N/A	41	50	N/A	++
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	7.8	N/A	8.3	9.4	17%	
F 3 Average Monthly Salary	Tk	26,305	N/A	18,807	19,960	-32%	!
F 4* % of Overtime to Basic Salary	%	33	N/A	10	32	-3%	
G) Customer Services							
G 1 New Service Connection							
G 1.1 Service Connection Application Received	Nos.	466	2,360	5,137	6,000	-21%	
G 1.2 Service Connection given	Nos.	448	2,055	4,394	5,000	-18%	
G 2 Billing complaints							
G 2.1 Complaints received	Nos.	260	1,210	1,798	4,500	46%	++
G 2.2 Complaints acted on	Nos.	220	990	1,469	3,500	43%	++
G 3 Leakage complaints received and attended	Nos.	371	2,377	3,978	5,000	5%	

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 / ((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:

12.02.2022
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14/2/2022
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