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CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY



**MANAGEMENT INFORMATION SYSTEM REPORT
AUGUST-2022**

**WASA BHABAN
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Chattogram Water Supply & Sewerage Authority
Monthly MIS Report

August 2022

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3
Selected Key Indicators							
E 17* Non Revenue Water						-35%	!
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	31	31	30	23	-4%	
D 9* Collection period	%	96	90	93	99	-1%	
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Em	Day	260	265	282	263	15%	
D 8* Operating Ratio	Nos.	7.2	N/A	7.3	8.5	14%	
A 3.5* Functioning meter rate of installed meter	Ratio	0.59	0.63	0.79	0.72	-5%	
E 19 Water quality sample	%	95	N/A	95	100	-92%	!
E 18* Leakage occurrence	No./month	200	400	2,400	2,400	94%	++
A 6* Water supply coverage	No./km/mtt	0.38	0.28	0.38	5.04	-18%	
B 5* Average tariff	%	61	N/A	62	75	-4%	
E 16* Unit production cost (in/c Capt. Cost, Deprec. & Financial Expense.	Tk/m3	14.69	14.18	14.28	15.28	69%	++
	Tk/m3	6.71	6.36	12.31	20.53		
A) Connection data							
A 1 Total registered connections	Nos.	87,276	N/A	86,788	91,700	-5%	
A 1.1 Billable (non-disconnected) connection	Nos.	81,484	N/A	81,005	85,700	-5%	
A 1.2 Non-billable (disconnected) connection	Nos.	5,792	N/A	5,783	6000	3%	
A 1.3 Billed connection	Nos.	80,221	N/A	78,980	84,000	-4%	
A 2 Breakdown of billable connection (by customer type)							
A 2.1* Domestic	%	93	N/A	93	93	0%	
A 2.2 Non-domestic	%	7	N/A	7	7	1%	
A 3 Breakdown of billable connection (by meter status)							
A 3.1 Metered	Nos.	76,934	N/A	77,176	81,700	-6%	
A 3.2 Average reading	Nos.	4,444	N/A	3,723	4,000	-11%	
A 3.3 Non meter	Nos.	106	N/A	106	106	0%	
A 3.4* Meter instaliation rate	%	100	N/A	100	100	0%	
A 3.5* Functioning meter rate of installed meter	%	95	N/A	95	100	-5%	
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	%	61	N/A	62	75	-18%	
A 7 Bill sent-out ratio	%	98	N/A	98	98	0%	

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	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks
B) Tariff							
B 1 Domestic				13.02	13.67	-5%	
B 2 Non-domestic	Tk/m3	13.02	N/A	31.82	33.41	-5%	
B 3 Street Hydrant	Tk/m3	31.82	N/A	13.02	13.67	-5%	
B 4 Religious Institutions	Tk/m3	13.02	N/A	13.02	13.67	-5%	
B 5* Average tariff	Tk/m3	13.02	N/A	13.02	15.28	-4%	
C) Billing and Collection							
C 1 Total billing						-8%	
C 1.1* Private	Tk	152,826,167	294,809,347	1,646,498,206	1,931,900,000	-1%	
C 1.2* Government	Tk	133,158,332	255,952,329	1,417,237,972	1,552,430,000	-39%	!
C 2 Billed volume (Total Volume Accounted)	Tk	19,667,835	38,857,018	229,260,234	379,470,000	-1%	
C 3 Total collection	ML	10,403	20,793	115,273	126,470	-17%	
C 3.1* Private	Tk	145,977,566	265,664,589	1,532,296,451	1,916,900,000	-16%	
C 3.2* Government	Tk	127,818,567	239,756,029	1,385,932,394	1,712,297,000	-24%	
C 4* Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	Tk	18,158,999	25,908,560	146,364,057	204,603,000	-4%	
C 4.1* Private	%	96	90	93	99	-13%	
C 4.2* Government	%	96	94	98	110	71%	++
D) Financial data:							
D 1 Revenue (Total)	Tk	169,843,185	306,429,866	1,828,840,771	2,296,850,000	-20%	
D 1.1 Water revenue	Tk	145,977,566	265,664,589	1,532,296,451	1,916,900,000	-52%	!
D 1.2* Tubewell license	Tk	4,901,237	7,922,958	114,045,305	100,000,000	-46%	!
D 1.3* Other operating revenues	Tk	10,631,049	16,175,652	82,499,015	179,950,000	0%	
D 1.4* Interest income	Tk	8,333,333	16,666,667	100,000,000	100,000,000	66%	++
D 2 Expenses (Total)	Tk	100,999,243	191,802,784	2,032,959,163	3,372,762,373	26%	++
D 2.1* Personnel cost	Tk	34,720,243	70,548,784	426,879,163	575,536,000	10%	++
D 2.2 Electricity cost	Tk	62,640,000	116,261,000	652,415,000	773,000,000	97%	++
D 2.3 Chemicals	Tk	637,000	653,000	141,233,000	140,000,000	100%	++
D 2.4* Depreciation	Tk	0	0	246,857,000	1,471,943,373	94%	++
D 2.5 Other operating cost	Tk	3,002,000	4,340,000	565,575,000	412,283,000	86%	++
D 2.5.1 Other O & M	Tk	2,799,000	4,128,000	220,317,000	173,693,000	99%	++
D 2.5.2 Capital cost from revenues	Tk	203,000	212,000	345,258,000	238,590,000	#DIV/0!	#DIV/0!
D 2.6* Financial expense	Tk	0	0	0	0	-164%	!
D 3 Net Income (Loss)	Tk	68,843,942	114,627,082	(204,118,392)	(1,075,912,373)	N/A	
D 4* Cash at bank	Tk	0	N/A	0	0	N/A	
D 5* Stock & stores	Tk	0	0	0	140,034	N/A	
D 6 Accounts Receivable	Tk	1,284,053,099	N/A	1,271,740,973	1,271,740,973	-1%	
D 6.1* Accounts receivable from Government	Tk	214,192,635	N/A	210,605,008	210,605,008	-1%	
D 6.2* Accounts receivable from Private	Tk	1,069,860,464	N/A	1,061,135,965	1,061,135,965	100%	++
D 7* Long term loans	Tk	0	0	0	303,047,050	14%	
D 8* Operating Ratio	Ratio	0.59	0.63	0.79	0.72	-1%	
D 9* Collection period	Day	260	265	282	263		

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	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ ! T v
E) Water Supply							
E 3 Capacity of Surface WTP (Mohora+Sk.H.WTP-1+Sk.H.WTP-2+SR)	MLD	466	N/A	466	490	-5%	#DIV/0!
E 4 Capacity of Ground WTP	MLD	68	N/A	68	68	0%	
E 5 Deep Tube Wells in Operation	Nos.	45	N/A	47	47	-4%	
E 6* Capacity of DTW - direct distribution	MLD	45	N/A	48	48	-5%	
E 7* Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!	
E 8* Capacity of distributable water production	MLD	579	N/A	581	605	-4%	
E 9 Length of Pipeline	km	962	N/A	962	992	-3%	
E 15* Production (distributable water)	ML	15,050.18	30,169	165,187	164,250	10%	
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	6.71	6.36	12.31	20.53	69%	
E 17* Non Revenue Water	%	31	31	30	23	-35%	!
E 18* Leakage occurrence	No./km/mth	0.38	0.28	0.38	5.04	94%	++
E 19 Water quality sample	No./month	200	400	2,400	2,400	-92%	!
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.	589	N/A	591	732	20%	++
F 1.1 Grade-3-9	Nos.	57	N/A	59	60	N/A	
F 1.2 Grade-10-11	Nos.	37	N/A	37	62	N/A	
F 1.3 Grade-12-16	Nos.	254	N/A	254	300	N/A	
F 1.4 Grade-17-20	Nos.	241	N/A	241	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	300	N/A	++
F 5.3 Project staff (hired by project budget)	Nos.	50	N/A	50	50	N/A	++
F 2* No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	7.2	N/A	7.3	8.5	15%	
F 3 Average Monthly Salary	Tk	27,407	N/A	18,802	19,960	-37%	!
F 4* % of Overtime to Basic Salary	%	24	N/A	1	32	25%	++
G) Customer Services							
G 1 New Service Connection	Nos.	593	978	5,296	6,000	-2%	
G 1.1 Service Connection Application Received	Nos.	534	905	4,934	5,000	9%	
G 1.2 Service Connection given							
G 2 Billing complaints	Nos.	190	340	2,510	4,500	55%	++
G 2.1 Complaints received	Nos.	160	284	2,050	3,500	51%	
G 2.2 Complaints acted on	Nos.	364	534	4,422	5,000	36%	
G 3 Leakage complaints received and attended							++

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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 exceeds 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.

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27.10.2022
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পরিকল্পনা ও নির্মাণ সার্কেল
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