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CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY



**MANAGEMENT INFORMATION SYSTEM REPORT
FOR THE MONTH OF August-2024**

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Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
August 2024

	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= {1-(billed water(C2)/distributable water production(E15*))} X 100		%	29	30	30	25	-21%		
C 4*	Revenue collection efficiency (monthly coll.+ outstand. Coll.)/ monthly bill. = (collection(C3)/billing(C1)) X100		%	83	85	90	129	-35%	!
D 9*	Collection period = (accounts receivable(D6)/monthly billings(C1)) X number of days of month		Day	282	278	270	200	-39%	!
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.) = (No. of permanent staff(F1) + non-permanent staff(F5) / total billable connections (A1.1)) X1000		Nos.	5.7	N/A	5.8	6.0	5%	
D 8*	Operating Ratio = (personal cost (D2.1) + electricity cost (D2.2) + chemical cost (D2.3) + other O & M (D2.5.1)) / (Total Revenues(D1))		Ratio	0.68	0.72	0.71	0.56	-28%	!
A 3.5*	Functioning meter rate of installed meter = no. of metered (A3.1)/ (no. of metered (A3.1) + average reading (A3.2)) X 100		%	90	N/A	90	90	0%	
E 19	Water quality sample (E19)		No./month	240	480	2,880	2,880	-92%	!
E 18*	Leakage occurrence = (no. of leakage recognized by complaint (G3)/ Length of Pipeline at the end of period(E9)/ no. of months covered)		No./km/mth	0.19	0.20	0.28	2.27	91%	++
A 6*	Water supply coverage = ((Billed connection (A1.3) X 26 Person per Connection) + (Total Street Hydrant (A4) X 80 Person per Street Hydrant) / Total Population in water Supply Area (N.B)) X 100		%	65	N/A	66	67	-2%	
B 5*	Average tariff = (Total billing(C1)/ Billed volume(C2)) / 1000		Tk/m3	19.18	19.12	19.00	20.00	-4%	
E 16*	Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.) = Expenses Total(D2)/(Production distributable water(E15*) +DTW Water directly distributed (E15.1*)) / 1000		Tk/m3	18.84	17.91	20.30	21.90	18%	
A) Connection data									
A 1	Total registered connections		Nos.	97,845	N/A	97,137	101,222	-3%	
A 1.1	Billable (non-disconnected) connection		Nos.	91,810	N/A	91,121	95,220	-4%	
A 1.2	Non-billable (disconnected) connection		Nos.	6,035	N/A	6,016	6002	-1%	
A 1.3	Billed connection		Nos.	90,058	N/A	89,508	91,932	-2%	
A 2	Breakdown of billable connection (by customer type)								
A 2.1*	Domestic		%	93	N/A	93	91	2%	
A 2.2	Non-domestic		%	7	N/A	7	9	22%	
A 3	Breakdown of billable connection (by meter status)								
A 3.1	Metered		Nos.	82,326	N/A	81,589	85,572	-4%	
A 3.2	Average reading		Nos.	9,382	N/A	9,430	9,546	2%	
A 3.3	Non meter		Nos.	102	N/A	102	102	0%	
A 3.4*	Meter installation rate		%	100	N/A	100	100	0%	
A 3.5*	Functioning meter rate of installed meter		%	90	N/A	90	90	0%	
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		%	65	N/A	66	67	-2%	
A 7	Bill sent-out ratio		%	98	N/A	98	97	2%	



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		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	18.00	N/A	18.00	18.90	-5%		
B 2	Non-domestic	Tk/m3	37.00	N/A	37.00	38.85	-5%		
B 3	Street Hydrant	Tk/m3	18.00	N/A	18.00	18.90	-5%		
B 4	Religious Institutions	Tk/m3	18.00	N/A	18.00	18.90	-5%		
B 5*	Average tariff	Tk/m3	19.18	19.12	19.00	20.00	-4%		
C) Billing and Collection									
C 1	Total billing	Tk	200,330,318	399,326,994	2,347,888,407	2,400,000,000	0%		
C 1.1*	Private	Tk	176,717,801	352,555,339	2,062,051,833	2,160,000,000	-2%		
C 1.2*	Government	Tk	23,612,517	46,771,655	285,836,574	240,000,000	17%		
C 2	Billed volume (Total Volume Accounted)	ML	10,445	20,886	123,549	120,000	4%		
C 3	Total collection	Tk	167,135,066	338,448,982	2,105,177,399	3,094,120,000	-34%	!	
C 3.1*	Private	Tk	156,826,369	315,389,631	1,992,878,824	2,929,067,275	-35%	!	
C 3.2*	Government	Tk	10,308,697	23,059,351	112,298,575	165,052,725	-16%		
C 4*	Revenue collection efficiency (monthly coll.+ outstand. Coll.)/ monthly bill.	%	83	85	90	129	-35%	!	
C 4.1*	Private	%	89	89	97	136	-35%	!	
C 4.2*	Government	%	44	49	39	69	-37%	!	
D) Financial data									
D 1	Revenue (Total)	Tk	183,677,187	377,425,690	2,425,189,135	3,457,920,000	-35%	!	
D 1.1	Water revenue	Tk	167,135,066	338,448,982	2,105,177,399	3,094,120,000	-34%	!	
D 1.2*	Tubewell license	Tk	2,492,737	7,216,281	115,878,743	100,000,000	-57%	!	
D 1.3*	Other operating revenues	Tk	4,882,718	15,093,761	114,132,993	163,800,000	-45%	!	
D 1.4*	Interest income	Tk	9,166,667	16,666,667	90,000,000	100,000,000	0%		
D 2	Expenses (Total)	Tk	278,341,622	535,515,616	3,583,597,467	4,396,985,820	27%	++	
D 2.1*	Personnel cost	Tk	34,987,016	65,476,672	517,744,367	631,470,000	38%	++	
D 2.2	Electricity cost	Tk	84,238,000	197,630,000	912,448,000	920,000,000	-29%	!	
D 2.3	Chemicals	Tk	0	67,000	139,542,000	140,000,000	100%	++	
D 2.4*	Depreciation	Tk	129,182,985	258,365,970	1,500,000,000	1,550,195,820	0%		
D 2.5	Other operating cost	Tk	10,020,000	13,348,000	513,863,100	935,960,000	91%	++	
D 2.5.1	Other O & M	Tk	6,572,000	9,306,000	159,148,100	260,700,000	79%	++	
D 2.5.2	Capital cost from revenues	Tk	3,448,000	4,042,000	354,715,000	675,260,000	96%	++	
✓ D 2.6*	Financial expense	Tk	627,974	627,974	0	7,200,000	48%	++	
D 3	Net Income (Loss)	Tk	(94,664,435)	(158,089,925)	(1,158,408,332)	(939,065,820)	1%		
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	1,823,592,795	N/A	1,737,729,584	1,737,729,584	-5%		
D 6.1*	Accounts receivable from Government	Tk	405,783,572	N/A	366,318,888	366,318,888	-11%		
D 6.2*	Accounts receivable from Private	Tk	1,417,809,223	N/A	1,371,410,696	1,371,410,696	-3%		
✓ D 7*	Long term loans	Tk	19,285,647	19,285,647	212,142,000	212,160,000	91%	++	
D 8*	Operating Ratio	Ratio	0.68	0.72	0.71	0.56	-28%	!	
D 9*	Collection period	Day	282	278	270	200	-39%	!	

Handwritten marks: a checkmark, a circle containing 'me', and a large 'L'.

		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-1+Sk.H.WTP-2+SRPS)	MLD	466	N/A	466	466	0%	
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	0%	
E 5	Deep Tube Wells in Operation	Nos.	42	N/A	45	55	-24%	
E 6*	Capacity of DTW - direct distribution	MLD	30	N/A	33	48	-38%	!
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	563	N/A	566	581	-3%	
E 9	Length of Pipeline	km	962	N/A	962	992	-3%	
E 15*	Production (distributable water)	ML	14,772.62	29,894	176,510.35	200,750	-11%	
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	18.84	17.91	20.30	21.90	18%	
E 17*	Non Revenue Water	%	29	30	30	25	-21%	
E 18*	Leakage occurrence	No./km/mth	0.19	0.20	0.28	2.27	91%	++
E 19	Water quality sample	No./month	240	480	2,880	2,880	-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.	524	N/A	527	570	8%	
F 1.1	Grade-3-9	Nos.	56	N/A	56	60	N/A	++
F 1.2	Grade-10-11	Nos.	36	N/A	36	30	N/A	++
F 1.3	Grade-12-16	Nos.	201	N/A	203	260	N/A	++
F 1.4	Grade-17-20	Nos.	231	N/A	232	220	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.	5.7	N/A	5.8	6.0	5%	
F 3	Average Monthly Salary	Tk	30,441	N/A	21,044	33,516	9%	
F 4*	% of Overtime to Basic Salary	%	46.51	N/A	24	32	-45%	!
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	201	424	4,570	4,000	-36%	!
G 1.2	Service Connection given	Nos.	168	494	4,480	3,800	-22%	
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	190	400	2,335	2,800	14%	
G 2.2	Complaints acted on	Nos.	170	350	1,960	2,300	9%	
G 3	Leakage complaints received and attended	Nos.	184	383	3,237	2,250	-2%	

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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).

A3.5: Functioning meter rate = 1 - (number of average reading connection / number of billable connection). This indicator is used as a proxy of ratio of metered water sold to total water sold.

A6: Water supply coverage is defined as (population served with piped water + population served by street hydrant) / population in service area.

In FY 2010/11, this was estimated at 42% (= (1.192 million + 0.07 million) / 2.98 million)

Supply coverage of this month is computed based on the following assumptions used in Business Plan.

(population in service area = 3 million; user population per connection = 30; population served with standpipes = 100,000; number of standpipes = 689)

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

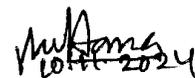
E18: Leakage occurrence = Number of leakage recognized by complaint / length of pipeline at the end of period / number of months covered

E20: This is the rate of satisfactory sample complying with the chlorine standard.

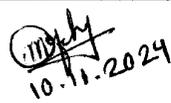
E21: This is the rate of satisfactory sample complying with the microbiological standard.

F2: No. of employee per 1000 connections = (number of permanent staff + non-permanent staff) / (total billable connections/1000)

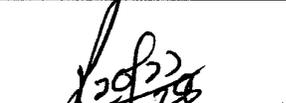
F4: Only staff workers (Class 3 and Class 4) receive overtime. Thus this ratio is computed based on Class 3 and Class 4 workers' pay.


10/11/2024

SAE


10.11.2024

AE


(Richard John Penhela)
Executive Engineer(A.G)
Design Division
Chattogram WASA Chattogram.


10/11/2024
মোঃ এম. এ. মাহমুদুল ইসলাম
তত্ত্বাবধায়ক প্রকৌশলী
(পরিকল্পনা ও নির্মাণ সার্কেল)
চট্টগ্রাম ওয়াসা।


21/11/2024
মোঃ এম. এ. মাহমুদুল ইসলাম
সিনিয়র প্রকৌশলী
চট্টগ্রাম ওয়াসা।

DMD (E)

প্রকৌ. বিষ্ণু কুমার সরকার
(উপসচিব)