

**CHATTOGRAM WATER SUPPLY AND  
SEWERAGE AUTHORITY**



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

**WASA BHABAN  
DAMPARA  
CHATTOGRAM, BANGLADESH**

Phone : 880-31-2851806  
Fax : 880-31-610465  
Email : [info@ctg-wasa.org.bd](mailto:info@ctg-wasa.org.bd)

**Chattogram Water Supply & Sewerage Authority**  
**Monthly MIS Report**  
**February 2024**

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3	
							++	Too good ! Very bad
<b>Selected Key Indicators</b>								
E 17*	Non Revenue Water	%	28	31	31	28	-12%	
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/month	%	89	88	87	116	-23%	
D 9*	Collection period	Day	246	263	235	200	-32%	!
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Em	Nos.	6.0	N/A	6.4	7.1	16%	
D 8*	Operating Ratio	Ratio	0.64	0.73	0.66	0.57	-28%	!
A 3.5*	Functioning meter rate of installed meter	%	90	N/A	92	100	-10%	
E 19	Water quality sample	No./month	240	1,920	2,400	2,880	-92%	!
E 18*	Leakage occurrence	No./km/mtf	0.33	0.29	0.35	1.81	84%	++
A 6*	Water supply coverage	%	65	N/A	64	75	-13%	
B 5*	Average tariff	Tk/m3	19.88	18.95	18.14	17.45	14%	
E 16*	Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	19.10	19.04	18.71	19.50	2%	
<b>A) Connection data</b>								
A 1	Total registered connections	Nos.	95,870	N/A	92,327	97,127	-1%	
A 1.1	Billable (non-disconnected) connection	Nos.	89,875	N/A	86,395	91,195	-1%	
A 1.2	Non-billable (disconnected) connection	Nos.	5,995	N/A	5,932	5932	-1%	
A 1.3	Billed connection	Nos.	88,129	N/A	83,698	88,270	0%	
A 2	Breakdown of billable connection (by customer type)							
A 2.1*	Domestic	%	93	N/A	93	92	1%	
A 2.2	Non-domestic	%	7	N/A	7	8	10%	
A 3	Breakdown of billable connection (by meter status)							
A 3.1	Metered	Nos.	80,899	N/A	78,966	83,092	-3%	
A 3.2	Average reading	Nos.	8,873	N/A	7,326	8,000	-11%	
A 3.3	Non meter	Nos.	103	N/A	103	103	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	92	100	-10%	
A 4	Street Hydrant	Nos.	689	N/A	689	689	0%	
A 5	Religious Institutions	Nos.	368	N/A	368	317	16%	
A 6*	Water supply coverage	%	65	N/A	64	75	-13%	
A 7	Bill sent-out ratio	%	98	N/A	97	100	-2%	



	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad	
<b>B) Tariff</b>								
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	19.88	18.95	18.14	17.45	14%	
<b>C) Billing and Collection</b>								
C 1	Total billing	Tk	198,051,887	1,553,743,020	2,155,873,661	2,292,809,481	2%	
C 1.1*	Private	Tk	173,232,036	1,366,103,368	1,888,365,971	1,948,888,059	5%	
C 1.2*	Government	Tk	24,819,851	187,639,652	267,507,690	343,921,422	-18%	
C 2	Billed volume (Total Volume Accounted)	ML	9,963	82,005	118,868	131,400	-6%	
C 3	Total collection	Tk	176,480,519	1,365,477,254	1,878,166,418	2,664,792,000	-23%	
C 3.1*	Private	Tk	165,414,486	1,298,027,837	1,738,727,636	2,345,016,960	-17%	
C 3.2*	Government	Tk	11,066,033	67,449,417	139,438,782	319,775,040	-68%	!
C 4*	Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill.	%	89	88	87	116	-23%	
C 4.1*	Private	%	95	95	92	120	-21%	
C 4.2*	Government	%	45	36	52	93	-52%	!
<b>D) Financial data</b>								
D 1	Revenue (Total)	Tk	215,424,407	1,550,668,722	2,203,110,954	3,025,592,000	-23%	
D 1.1	Water revenue	Tk	176,480,519	1,365,477,254	1,878,166,418	2,664,792,000	-23%	
D 1.2*	Tubewell license	Tk	20,993,775	46,854,963	125,253,767	100,000,000	-30%	!
D 1.3*	Other operating revenues	Tk	10,450,113	78,336,505	99,690,769	170,800,000	-31%	!
D 1.4*	Interest income	Tk	7,500,000	60,000,000	100,000,000	90,000,000	0%	
D 2	Expenses (Total)	Tk	263,784,144	2,271,291,214	3,224,457,367	3,559,449,000	4%	
D 2.1*	Personnel cost	Tk	34,699,144	311,118,214	442,684,994	602,585,000	23%	
D 2.2	Electricity cost	Tk	70,548,000	610,336,000	762,236,000	760,000,000	-20%	
D 2.3	Chemicals	Tk	25,788,000	88,770,000	111,276,000	140,000,000	5%	
D 2.4*	Depreciation	Tk	125,000,000	1,000,000,000	1,471,943,373	1,500,000,000	0%	
D 2.5	Other operating cost	Tk	7,749,000	261,067,000	436,317,000	556,864,000	30%	++
D 2.5.1	Other O & M	Tk	6,176,000	116,951,000	148,795,000	214,144,000	18%	
D 2.5.2	Capital cost from revenues	Tk	1,573,000	144,116,000	287,522,000	342,720,000	37%	++
D 2.6*	Financial expense	Tk	0	0	0	0	#DIV/0!	#DIV/0!
D 3	Net Income ( Loss )	Tk	(48,359,737)	(720,622,491)	(1,021,346,413)	(533,857,000)	102%	++
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	1,680,714,848	N/A	1,386,963,271	1,386,963,271	-21%	
D 6.1*	Accounts receivable from Government	Tk	360,063,693	N/A	228,472,232	228,472,232	-58%	!
D 6.2*	Accounts receivable from Private	Tk	1,320,651,155	N/A	1,158,491,039	1,158,491,039	-14%	
D 7*	Long term loans	Tk	0	120,462,000	303,047,050	212,160,000	100%	++
D 8*	Operating Ratio	Ratio	0.64	0.73	0.66	0.57	-28%	!
D 9*	Collection period	Day	246	263	235	200	-32%	!

Handwritten signatures and initials at the bottom of the page.

	Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad
<b>E) Water Supply</b>							
E 3	Capacity of Surface WTP (Mohora+Sk.H.WTP-1+Sk.H.WTP-2+SF)	MLD	466	N/A	466	490	-5%
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	0%
E 5	Deep Tube Wells in Operation	Nos.	44	N/A	48	47	-6%
E 6*	Capacity of DTW - direct distribution	MLD	32	N/A	35	48	-32%
E 7*	Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!
E 8*	Capacity of distributable water production	MLD	566	N/A	569	605	-7%
E 9	Length of Pipeline	km	962	N/A	962	992	-3%
E 15*	Production (distributable water)	ML	13,812.89	119,286	172,320	182,500	-2%
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	19.10	19.04	18.71	19.50	2%
E 17*	Non Revenue Water	%	28	31	31	28	-12%
E 18*	Leakage occurrence	No./km/mtf	0.33	0.29	0.35	1.81	84%
E 19	Water quality sample	No./month	240	1,920	2,400	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%
<b>F) Personnel</b>							
F 1	No. of permanent employees (Total)	Nos.	535	N/A	554	650	18%
F 1.1	Grade-3-9	Nos.	56	N/A	54	60	N/A
F 1.2	Grade-10-11	Nos.	36	N/A	36	62	N/A
F 1.3	Grade-12-16	Nos.	210	N/A	229	260	N/A
F 1.4	Grade-17-20	Nos.	233	N/A	235	268	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) 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.	6.0	N/A	6.4	7.1	16%
F 3	Average Monthly Salary	Tk	32,272	N/A	19,364	31,195	-3%
F 4*	% of Overtime to Basic Salary	%	27	N/A	14	32	15%
<b>G) Customer Services</b>							
G 1	New Service Connection						
G 1.1	Service Connection Application Received	Nos.	428	3,434	5,202	5,000	3%
G 1.2	Service Connection given	Nos.	354	3,275	4,769	4,000	23%
G 2	Billing complaints						
G 2.1	Complaints received	Nos.	180	1,555	2,300	2,700	14%
G 2.2	Complaints acted on	Nos.	160	1,300	1,819	2,200	11%
G 3	Leakage complaints received and attended	Nos.	321	2,271	4,078	1,800	-89%

✓

*n*

*mg*

*d*

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

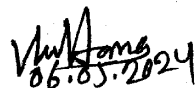
E18: Leakage occurrence = Number of leakage recognized by complaint / length of pipeline at the end of period / number of months covered

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

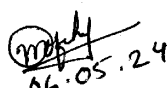
E21: This is the rate of satisfactory sample complying with the microbiological standard.

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.

  
06.05.24

SAE

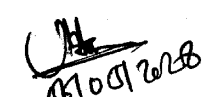
  
06.05.24

AE

  
XEN  
(Richard Nelson Penheiro)  
Executive Engineer (A.C.)  
Design Division  
Chattogram WASA, Chattogram.

  
06/05/24

SVP&E

  
06/05/2028  
মোঃ হুমায়ুন আলম  
প্রধান প্রকৌশলী  
চট্টগ্রাম ওয়াসা, চট্টগ্রাম।

DMD (E)