CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY

# MANAGEMENT INFORMATION SYSTEM REPORT

## FOR THE MONTH OF June-2024

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# Chattogram Water Supply & Sewerage Authority
## Monthly MIS Report
## June 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 | % | 28 | 30 | 31 | 28 | -7% | |
| C 4* | Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill. | % | 116 | 90 | 87 | 116 | 0% | |
| D 9* | Collection period | Day | 258 | 270 | 235 | 200 | -35% | ! |
| F 2* | No. of perma. employee per 1000 connections(excl. non-perma. Empl.) | Nos. | 5.8 | N/A | 6.4 | 7.1 | 19% | |
| D 8* | Operating Ratio | Ratio | 0.63 | 0.71 | 0.66 | 0.57 | -26% | ! |
| A 3.5* | Functioning meter rate of installed meter | % | 90 | N/A | 92 | 100 | -10% | |
| E 19 | Water quality sample | No./month | 240 | 2,880 | 2,400 | 2,880 | -92% | ! |
| E 18* | Leakage occurrence | No./km/mth | 0.20 | 0.28 | 0.35 | 1.81 | 85% | ++ |
| A 6* | Water supply coverage | % | 66 | N/A | 64 | 75 | -11% | |
| B 5* | Average tariff | Tk/m3 | 19.37 | 19.00 | 18.14 | 17.45 | 11% | |
| E 16* | Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.) | Tk/m3 | 26.67 | 20.30 | 18.71 | 19.50 | -4% | |
| A) Connection data | | | | | | | | |
| A 1 | Total registered connections | Nos. | 97,137 | N/A | 92,327 | 97,127 | 0% | |
| A 1.1 | Billable (non-disconnected) connection | Nos. | 91,121 | N/A | 86,395 | 91,195 | 0% | |
| A 1.2 | Non-billable (disconnected) connection | Nos. | 6,016 | N/A | 5,932 | 5932 | -1% | |
| A 1.3 | Billed connection | Nos. | 89,508 | N/A | 83,698 | 88,270 | 1% | |
| 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. | 81,589 | N/A | 78,966 | 83,092 | -2% | |
| A 3.2 | Average reading | Nos. | 9,430 | N/A | 7,326 | 8,000 | -18% | |
| A 3.3 | Non meter | Nos. | 102 | N/A | 103 | 103 | 1% | |
| 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 | % | 66 | N/A | 64 | 75 | -11% | |
| 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) 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 | 19.37 | 19.00 | 18.14 | 17.45 | 11% | |
| C) Billing and Collection | | | | | | | | |
| C 1 | Total billing | Tk | 201,934,673 | 2,347,888,407 | 2,155,873,661 | 2,292,809,481 | 2% | |
| C 1.1* | Private | Tk | 177,323,773 | 2,062,051,833 | 1,888,365,971 | 1,948,888,059 | 6% | |
| C 1.2* | Government | Tk | 24,610,900 | 285,836,574 | 267,507,690 | 343,921,422 | -17% | |
| C 2 | Billed volume (Total Volume Accounted) | ML | 10,426 | 123,549 | 118,868 | 131,400 | -6% | |
| C 3 | Total collection | Tk | 233,733,202 | 2,105,177,399 | 1,878,166,418 | 2,664,792,000 | -21% | |
| C 3.1* | Private | Tk | 216,317,369 | 1,992,878,824 | 1,738,727,636 | 2,345,016,960 | -15% | |
| C 3.2* | Government | Tk | 17,415,833 | 112,298,575 | 139,438,782 | 319,775,040 | -65% | ! |
| C 4* | Revenue collection efficiency(monthly coll.+outstand. Coll.)/monthly bill. | % | 116 | 90 | 87 | 116 | 0% | |
| C 4.1* | Private | % | 122 | 97 | 92 | 120 | 1% | |
| C 4.2* | Government | % | 71 | 39 | 52 | 93 | -24% | |
| D) Financial data | | | | | | | | |
| D 1 | Revenue (Total) | Tk | 253,370,672 | 2,425,189,135 | 2,203,110,954 | 3,025,592,000 | -20% | |
| D 1.1 | Water revenue | Tk | 233,733,202 | 2,105,177,399 | 1,878,166,418 | 2,664,792,000 | -21% | |
| D 1.2* | Tubewell license | Tk | 4,390,473 | 115,878,743 | 125,253,767 | 100,000,000 | 16% | |
| D 1.3* | Other operating revenues | Tk | 7,746,997 | 114,132,993 | 99,690,769 | 170,800,000 | -33% | ! |
| D 1.4* | Interest income | Tk | 7,500,000 | 90,000,000 | 100,000,000 | 90,000,000 | 0% | |
| D 2 | Expenses (Total) | Tk | 388,765,879 | 3,583,597,467 | 3,224,457,367 | 3,559,449,000 | -1% | |
| D 2.1* | Personnel cost | Tk | 70,894,779 | 517,744,367 | 442,684,994 | 602,585,000 | 14% | |
| D 2.2 | Electricity cost | Tk | 44,714,000 | 912,448,000 | 762,236,000 | 760,000,000 | -20% | |
| D 2.3 | Chemicals | Tk | 40,809,000 | 139,542,000 | 111,276,000 | 140,000,000 | 0% | |
| D 2.4* | Depreciation | Tk | 125,000,000 | 1,500,000,000 | 1,471,943,373 | 1,500,000,000 | 0% | |
| D 2.5 | Other operating cost | Tk | 107,348,100 | 513,863,100 | 436,317,000 | 556,864,000 | 8% | |
| D 2.5.1 | Other O & M | Tk | 3,393,100 | 159,148,100 | 148,795,000 | 214,144,000 | 26% | ++ |
| D 2.5.2 | Capital cost from revenues | Tk | 103,955,000 | 354,715,000 | 287,522,000 | 342,720,000 | -3% | |
| D 2.6* | Financial expense | Tk | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| D 3 | Net Income ( Loss ) | Tk | (135,395,207) | (1,158,408,332) | (1,021,346,413) | (533,857,000) | 117% | ++ |
| 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 | 1,737,729,584 | N/A | 1,386,963,271 | 1,386,963,271 | -25% | ! |
| D 6.1* | Accounts receivable from Government | Tk | 366,318,888 | N/A | 228,472,232 | 228,472,232 | -60% | ! |
| D 6.2* | Accounts receivable from Private | Tk | 1,371,410,696 | N/A | 1,158,491,039 | 1,158,491,039 | -18% | |
| D 7* | Long term loans | Tk | 45,840,000 | 212,142,000 | 303,047,050 | 212,160,000 | 78% | ++ |
| D 8* | Operating Ratio | Ratio | 0.63 | 0.71 | 0.66 | 0.57 | -26% | ! |
| D 9* | Collection period | Day | 258 | 270 | 235 | 200 | -35% | ! |

| | | 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 | 490 | -5% | |
| E 4 | Capacity of Ground WTP | MLD | 68 | N/A | 68 | 68 | 0% | |
| E 5 | Deep Tube Wells in Operation | Nos. | 45 | N/A | 48 | 47 | -4% | |
| E 6* | Capacity of DTW - direct distribution | MLD | 33 | N/A | 35 | 48 | -32% | ! |
| 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 | 566 | N/A | 569 | 605 | -6% | |
| E 9 | Length of Pipeline | km | 962 | N/A | 962 | 992 | -3% | |
| E 15* | Production (distributable water) | ML | 14,574.64 | 176,510 | 172,320 | 182,500 | -3% | |
| 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 | 26.67 | 20.30 | 18.71 | 19.50 | -4% | |
| E 17* | Non Revenue Water | % | 28 | 30 | 31 | 28 | -7% | |
| E 18* | Leakage occurrence | No./km/mth | 0.20 | 0.28 | 0.35 | 1.81 | 85% | ++ |
| E 19 | Water quality sample | No./month | 240 | 2,880 | 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% | |
| **F) Personnel** | | | | | | | | |
| F 1 | No. of permanent employees (Total) | Nos. | 527 | N/A | 554 | 650 | 19% | |
| 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. | 203 | N/A | 229 | 260 | N/A | ++ |
| F 1.4 | Grade-17-20 | Nos. | 232 | N/A | 235 | 268 | 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. | 5.8 | N/A | 6.4 | 7.1 | 19% | |
| F 3 | Average Monthly Salary | Tk | 21,044 | N/A | 19,364 | 31,195 | 33% | ++ |
| F 4* | % of Overtime to Basic Salary | % | 24 | N/A | 14 | 32 | 26% | ++ |
| **G) Customer Services** | | | | | | | | |
| G 1 | New Service Connection | | | | | | | |
| G 1.1 | Service Connection Application Received | Nos. | 258 | 4,570 | 5,202 | 5,000 | -9% | |
| G 1.2 | Service Connection given | Nos. | 293 | 4,480 | 4,769 | 4,000 | 12% | |
| G 2 | Billing complaints | | | | | | | |
| G 2.1 | Complaints received | Nos. | 210 | 2,335 | 2,300 | 2,700 | 14% | |
| G 2.2 | Complaints acted on | Nos. | 180 | 1,960 | 1,819 | 2,200 | 11% | |
| G 3 | Leakage complaints received and attended | Nos. | 191 | 3,237 | 4,078 | 1,800 | -80% | ! |

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 )
Suppply 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)/((Dstributable 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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SAE

01.09.2024
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SE (P&C)

01/09/2024
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