



FEDERAL CAPITAL TERRITORY WATER BOARD (FCTWB)



**2024
ANNUAL REPORT**

Table of Contents

1	INTRODUCTION.....	1
1.1	Establishment	1
1.2	Vision	1
1.3	Mission	1
1.4	Values	1
2	MANAGEMENT	2
2.1	Organizational Structure	2
2.2	Manpower	2
3	OPERATIONAL CAPACITIES	4
3.1	The lower Usuma dam (LUD)	4
3.2	Treatment Plants 1 & 2	4
3.3	Treatment Plants 3 & 4	4
3.4	Storage Tanks	4
3.5	Distribution Network	7
4	TARIFFS.....	8
4.1	Tariff table	8
5	PERFORMANCES	9
5.1	Water Performance	9
5.2	Number of Users	10
5.3	Revenue Performance	10
5.4	Financial Position	11
6	KEY PERFORMANCE INDICATOR (KPI)	12
6.1	Capacity Turnover Ratio	12
6.2	Population coverage ratio	12
6.3	RW ratio	13
6.4	Staff productivity	13
7	CHALLENGES, RECOMMENDATION AND CONCLUSION.....	13
7.1	Challenges	13
7.2	Recommendation	13
7.3	Conclusion	14

1 INTRODUCTION

1.1 Establishment

The FCT Water Board established in **October 1989**; with the Primary mandate of providing potable water of adequate quantity and quality at equitable rates to residents of the Federal Capital City.

The Water Board is the sole agency responsible for the production and supply of water in the FCT. This mandate includes the management & maintenance of all water works within the City, harnessing all water resources of the territory for economic development; conduct research for the purpose of carrying out its functions and submission of research findings for policy formulation.

1.2 Vision

To be a world class water utility which is consistent in excellent service delivery and uncompromising in the quality of its product - potable water.

1.3 Mission

To provide the residents of the Federal Capital Territory with Potable water using the Best of Industry Technology and a Highly Skilled Workforce to provide Exceptional Services.

1.4 Values

Professionalism, Integrity, Efficiency, Timeliness, Courtesy

2 MANAGEMENT

2.1 Organizational Structure

The figure below shows the organogram of the FCT Water Board as at 2024, which reflects the organizational structure.

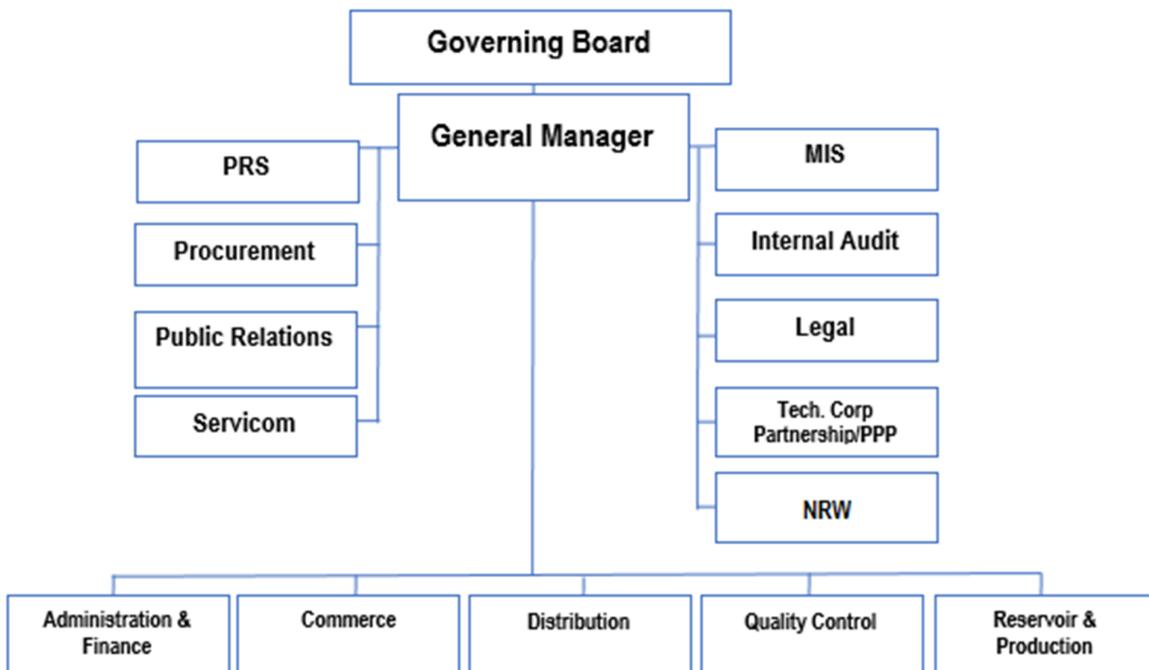


Figure 2.1: FCT Water Board Organogram, 2024

2.2 Manpower

The FCT Water Board has a total staff strength of personnel comprising of both permanent and casual Staff. The table below shows the number of permanent staff only, for the last 3 years:

S/N	Staff Category	2022	2023	2024
1	Total no. of Male Staff	570	544	504

2	Total no. of Female staff	261	258	248
Total no. of Staff		831	802	752

Table 2.1: Total number of staff in the last 3 years

S/N	Staff Category	2022	2023	2024
1	Male Staff	69%	68%	67%
2	Female staff	31%	32%	33%

Table 2.2: Percentage of male and female staff in the last 3 years

The chart below shows that there was no significant increase in the percentage of male to female staff in the last 3 years.

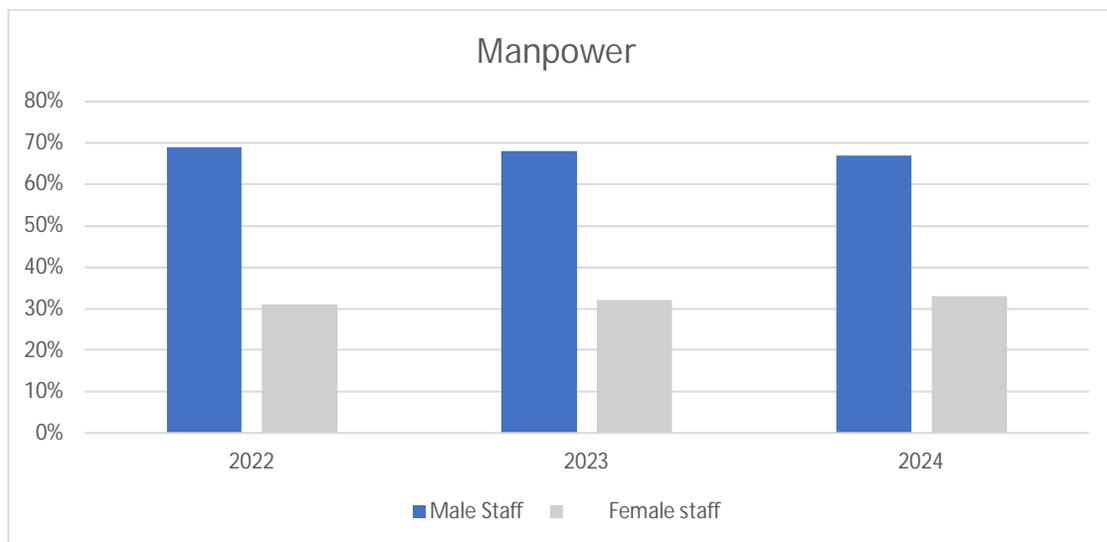


Figure 2.2: Percentage of male and female staff in the last 3 years

3 OPERATIONAL CAPACITIES

3.1 The Lower Usuma Dam (LUD)

The dam was commission in 1987 to provide adequate raw water for Abuja capital city and its environs. The total storage capacity of the raw water available is 100million cubic meter (cu.m). Grossly inadequate, because of the city's phenomenal growth in size and population

3.2 Treatment Plants 1 & 2

Treatment plant 1 was constructed in 1987 while treatment plant 2 was constructed in 2000, each with capacity 5,000cu.m/hr. designed to operate 24hrs a day thus the total output of 240,000cu.m/day is expected

3.3 Treatment Plants 3 & 4

Treatment plant 3 & 4 were both constructed in 2014 each with designed capacity of 10,000 m³/hour, to provide 240,000cu.m/day treated water each boosting treated water supply to 720,000cu.m/day.

3.4 Storage Tanks

The Abuja Storage tanks are located along the periphery of the City which functions mostly as balancing tanks. They consist of clear water reservoirs that meet the variation in demand and provide reserve supply in case of emergency. The design is semi-underground and ground levels in construction and rectangular in shape.

Pumping is done to provide sufficient filling of high-elevated reservoir and provide adequate pressure to the distribution lines for gravity distribution. Commonly used are the centrifugal pumps of fixed speed.

Tanks 1 & 6 are under construction while Tank 2, 3 and 4 are fully operational while tank 5 was partially handed over to the Board in October 2010. All the storage tanks are fed by gravity from the treatment plants and each similarly feed the city by gravity with negligible pumping to higher elevation and high-rise areas of Federal Capital City (FCC).

Storage tanks 3 & 4 have satellite tanks, which feed the districts at high elevation – e.g. Maitama in the case of tank 3 (3.1) and Asokoro in the case of tank 4 (4.1). The summary of all the storage tanks including booster stations as well as their equipment, capacity, year of construction and status are presented in the table below:

S/N	Station	Location	Capacity	Year of Construction	Electro-Mechanical Equipment	Area Served	Status/Remarks
I. Main Storage Tanks							
1	Tank 1	Dawaki	40,000m ³			Phase III	Construction ongoing
2	Tank 2	Katampe	45,000 m ³	2003	Nil	L/camp, Jabi, Utako, G/Pa and Kado	Fully operational
3	Tank 3 Main	Maitama	12,000m ³	1984	4 Pumps 1 Gen Set	Wuse, Maitama, A5 & A6 Wuse II	Operational
4	Tank 3 extension	Maitama	12,000m ³	1994	4 Pumps	Army Barracks, Wuse I, Wuse II and Maitama	Operational
5	Tank 3.1	Mpape Hill	5,400 m ³	1987	Nil	Maitama A6	Fully operational
6	Tank 4 Main	Asokoro	12,000m ³	1984	4 Pumps 1 Gen Set	Garki, Nyanya/Karu, Asokoro Central Area, Gudu & Tank 4-1	Operational
7	Tank 4 Extension	Asokoro	12,000 m ³	1994	Nil	Garki, Nyanya/Karu, Asokoro & Central Area	Fully operational
8	Tank 4-1	Asokoro	12,000 m ³	1990	3 Pumps 4	Abacha Barracks Tank by pump	Operational
9	Tank 4-1-2	Asokoro (Barrack)	6,000 m ³	1994	Nil	Abacha Barrack by gravity	Operational
10	Tank 4-1	Asokoro	5,400 m ³	1987	Nil	Asokoro high rise elevation	Operational
11	Tank 5	Apo	40,000 m ³		Nil	Phase II	Partially handed over
12	Tank 6	Apo	40,000m ³			Phase III	Construction ongoing
13	Airport Tank	Airport	12,000 m ³	1994	Nil	Airport Environs &	Fully operational
14	Bwari Tank	Bwari	12,500 m ³	2006	4 Pumps	Bwari Environs &	Fully operational

15	Gwagwalada Tank	Gwako	20,000 m ³	1994	Nil	Gwagwalada	Fully operational
16	Kubwa Tank	Kubwa	12,000 m ³	1993	Nil	Kubwa	Fully operational
17	Karu Tank	Kugbo	10,000 m ³	1993	Nil	Karu & Nyanya	Fully operational
II. Booster Stations							
1	Berger Booster Station	Asokoro		1993	4 Pumps	Asokoro high elevation	Operational
2	Dantata Booster Station	Asokoro		1996	1 Gen Set	Asokoro high elevation	Operational
3	Hamza Hill Booster Station	Maitama		1993	4 Pumps	Maitama A6 high elevation	Operational
4	Ministers Hill Booster Station	Maitama		1993	2 Pumps	Maitama high elevation ministers' quarters	Operational

3.5 Distribution Network

The Department distributes potable water to the FCC (Federal Capital City), Airport community, Gwagwalada, Karu, Nyanya, Abaji, Bwari & Kubwa satellite towns from its water works located at Lower Usuma Dam along Bwari Road.

The Lower Usuma Dam reservoir with a capacity of 100 million cubic meter storage reservoir and also in addition being fed by Gurara Inter Basin Raw Water transfer which augments the reservoir. The two treatment plants have a combined capacity of 240,000 cubic meters per day for treatment process. The treated water is conveyed by two number 1500mm \varnothing D.I pipes into the trunk line to various tanks e.g. (2, 3, 4 and 5) located in Katampe, Maitama, Asokoro and Apo areas respectively.

In addition to the above, another trunk line with a 1000mm \varnothing GRP (Glass Reinforced pipe) pipeline was contracted from Lower Usuma dam waterworks to a storage tank in Kubwa with a capacity of 10,000 cubic meters. The line was extended to serve the Airport and Gwagwalada towns. Similarly, Bwari Area Council is also being fed by a 1000mm \varnothing GRP trunk line connected to a storage tank in Bwari with capacity of 10,000 cubic meters.

The water distribution main pipes consist of various sizes of pipes with numerous service connections to the users. It varies from 100mm \varnothing to 400mm \varnothing , some of which are made of PE and uPVC pipes depending on the number of consumers. The design is looping systems. Optimal operation is achieved with the presence of reservoirs, pumping stations and other appurtenances.

In addition to the above, Abaji Town, Nahari, Kekeshi and Abuja University of Sciences and Technology community are being serve by the mini treatment plant with production capacity of 5,000 cubic meters per day with associate transmission and distribution networks.

The length of water distribution network as at 2024, is 558.80km

4 TARIFFS

4.1 Tariff table

The current tariff for various category of customers which took effect from October 2022 is shown in the table below:

S/N	Items (₦)	Domestic(₦)	Commercial (₦)	Financial Institutions (₦)	Industrial (₦)	Government Institution (₦)	Public Tap/ Conveniences (₦)	Embassies (₦)
1	Water Connection (25mmØ Pipe)	55,000.00	80,000.00	80,000	350,000.00 & above	65,000.00	80,000.00	65,000
2	Flat Rate Billing (₦)	7,150.00	90,000.00	90,000	Metered	Metered	90,000.00	Metered
3	Meter Rate Billing (₦ per m ³)	110.00	300.00	300.00	500.00	200.00	300.00	150.00
4	Water Tanker 10,000 Litres	8,000						
5	Water Tanker 5,000 Litres	4,000						

Table 4.1: Current Water tariff from October 2022 till date

5 PERFORMANCES

5.1 Water Performance

The table below shows the volume of raw water, treated water and revenue water in the last 3 Years.

Year	Raw Water (m ³)	Treated Water (m ³)	Revenue Water (m ³)
2022	131,772,227	117,171,397	58,210,750
2023	155,780,178	131,802,992	66,534,150
2024	160,479,057	141,729,620	87,007,813

Table 5.1: Volume raw water, treated water, and revenue water from 2022 - 2024

The table below shows that the percentage of non-revenue water has decreased steadily in the last 3 years:

Year	Non-Revenue Water
2022	50.32%
2023	49.52%
2024	38.61%

Table 5.2: Percentage of non-revenue water in the last 3 years

The chart below shows steady decrease in non-revenue water from 2022 – 2024

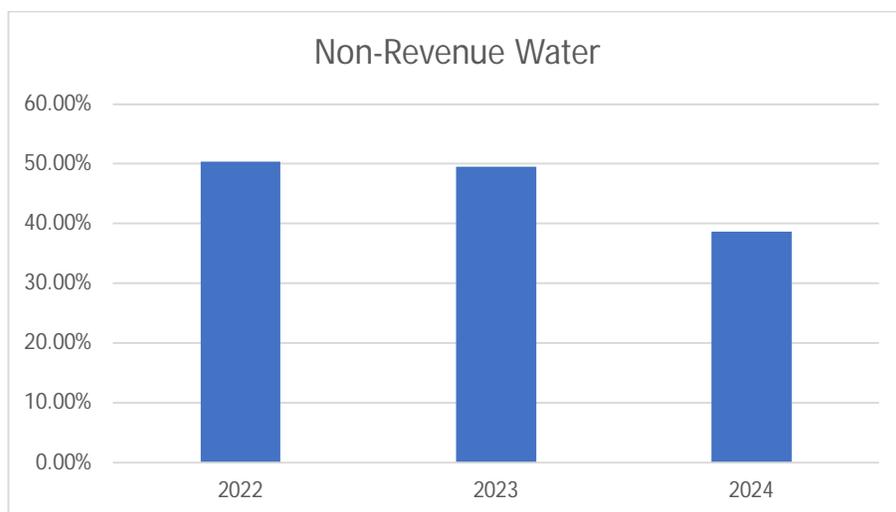


Figure 5.1: Graph showing percentage of non-revenue water in the last 3 years

5.2 Number of Users

The number of users has increased steadily over the years due to increasing population of service area and the ever-increasing demand for clean and portable water.

The table below shows an estimated number of users of FCT Water Board water in the last 3 years

Year	Number of Users
2022	1,146,360
2023	1,169,234
2024	1,182,681

Table 5.2: Total estimated number of water users from 2022 - 2024

5.3 Revenue Performance

The table below shows the value of bills raised, revenue collected and the collection rate in the last 3 years.

Year	Revenue (Billing)	Revenue (collection)	Collection Rate (%)
2022	5,291,516,269.95	2,448,651,897.07	46.3
2023	6,706,312,230.31	3,324,768,022.92	49.6
2024	6,130,344,434.66	3,551,171,549.42	40.16

The chart below shows the gradual increase in the revenue collection rate in the last 3 years

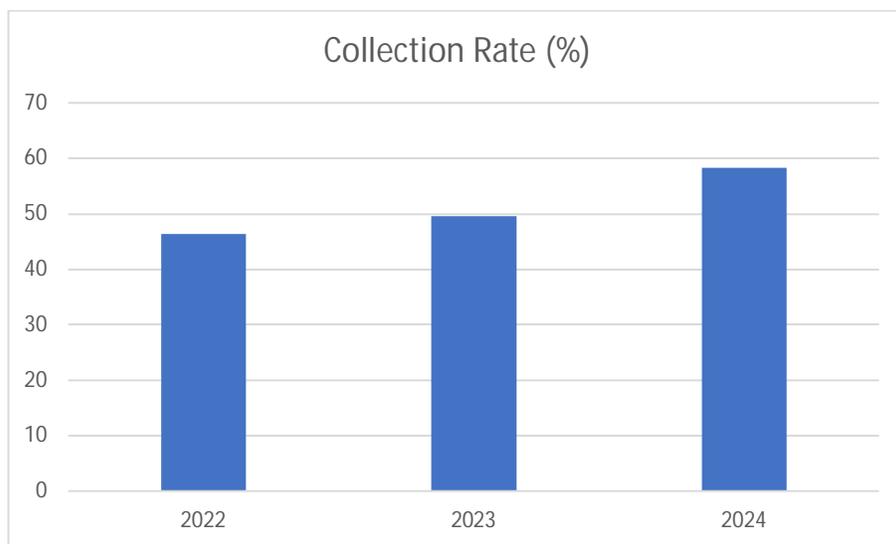


Figure 5.2: Graph showing revenue collection rate in the last 3 years

5.4 Financial Position

The financial position of the FCT Water Board as at 2020 is shown below.

Category	Value (million Naira)
1. Total of Assets	29,903
(1) Current Assets	24,850
(2) Fixed Assets	5,053
2. Total of Liabilities and Equity	29,903
(1) Liabilities	13
(2) Equity	29,890

7 KEY PERFORMANCE INDICATOR (KPI)

6.1 Capacity Turnover Ratio

$$\begin{aligned} & \%: \text{Treated water/Actual capacity} \\ & = (141,729,620 / 262,800,000) * 100 \\ & = \mathbf{53.9\%} \end{aligned}$$

6.2 Population coverage ratio

$$\begin{aligned} & \%: \text{Served population/Area population} \\ & = (1,182,681 / 4,026,000) * 100 \\ & = (0.2938) * 100 \\ & = \mathbf{29.4\%} \end{aligned}$$

6.3 Revenue Water (RW) ratio

#: Revenue water/Treated water

$$= (87,007,813 / 141,729,620) * 100$$

$$= 0.6139 * 100$$

$$= \mathbf{61.4\%}$$

6.4 Staff productivity

#: Number of staff/1000 connections

$$= (752 / 66,804) \text{ per } 1000 \text{ connections}$$

$$= \mathbf{11 \text{ staff per } 1000 \text{ connections}}$$

8 CHALLENGES, RECOMMENDATION AND CONCLUSION

7.1 Challenges

- i) Faulty meters/Estimated billing
- ii) Lack of adequate fund needed for effective monitoring.
- iii) Constant downtime on Remita site & non-reflection of payment
- iv) Insufficient Billing Equipment
- v) Frequent breakdown in bill printing machine
- vi) Poor debt Recovery procedure

7.2 Recommendation

- i) Timely replacement of faulty meters
- ii) Access to Remita payments by Revenue Generating units
- iii) Provision of more billing Equipment
- iv) Cleaning the Database/New Debt Recovery Strategy

- v) Upgrading the server infrastructure to minimize downtime and ensure uninterrupted service delivery.

7.3 **Conclusion**

It is important to acknowledge the fact that we are presently experiencing water infrastructure deficit in FCT. The rate of population growth in FCT over the past twenty (20) years has by far surpassed the present water infrastructure. The urban water supply coverage is currently less than 35%. The low coverage is as a result of water infrastructure deficit, poor maintenance of our existing infrastructure and under-utilized production systems.

Our strategy is to inculcate scheduled preventive and servicing maintenance system into our daily routine to prolong the life expectancy of our water infrastructure and expand the networks to un-served areas for better accelerated coverage and improved revenue collection.