



CAMEROON WATER UTILITIES COPORATION (CAMWATER)

STATISTICAL YEARBOOK

GENERAL MANAGEMENT

ENGINEERING DESIGN, PLANNING
AND SANITATION DEPARTMENT

GEOMATICS AND STATISTICS
SUBDEPARTMENT

STATISTICS SERVICE

2023 Edition





31 December 2023

President of the Republic, Head of State

◀ The project to supply drinking water to the City of Yaounde and its environs from the Sanaga River is virtually completed. Its imminent commissioning will help to substantially reduce the drinking water deficit in the city of Yaounde.

Studies on the project to supply drinking water to the city of Douala and its environs are well advanced. In the long term, the city of Douala will be supplied with an additional 400 thousand cubic metres of water daily.

Moreover, the Government has embarked on upgrading drinking water production plants in several secondary towns, namely Dschang, Yabassi, Garoua-Boulai, etc ▶

**Extract from the message to the
Nation of H.E. Mr Paul BIYA**



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Prime Minister, Head of Government



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*Minister of Water Resources and
Energy*



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PREFACE

In its aim of achieving emergence by 2035, Cameroon has launched the implementation of the second phase of its development vision with the National Development Strategy 2020-2030 (NDS 30). This paper, a reference framework for government action, consolidates, on the one hand, the achievements of the Growth and Employment Strategy Paper (GESP) and promotes, on the other hand, the structural transformation of the economy.

The National Strategy for the Development of Statistics 2021-2030 (NSDS 30) is the monitoring and evaluation mechanism of the NDS30. It promotes a demand-driven approach that implies the production of statistics that meets the information needs for the monitoring and evaluation of national policies and the various international development commitments.

The implementation of this monitoring and evaluation framework requires the setting up, within administrations and public entities, of Statistical Information Systems (SIS) whose key output is the statistical yearbook.

Developed in accordance with the National Statistical Quality Assurance Framework (NQAF), this first edition of the CAMWATER statistical yearbook is a modern and reliable tool to manage public policies in the field of water and effluent sanitation.

I therefore call on the public and private economic stakeholders, as well as users to make good use of this tool.



REPUBLIQUE DU CAMEROUN
Républik of Cameroon
Ministère de l'Eau et de l'Énergie
ELOUNDOU ESSOMBA Gaston

FOREWORD

For more than a year now, the Cameroon Water Utilities Corporation (CAMWATER) has undertaken an extensive programme to reform its Statistical Information System in line with the National Strategy for the Development of Statistics 2021-2030 (NSDS3, the reference framework for the monitoring and evaluation of public policies.

The first-ever edition of this CAMWATER Statistical Yearbook 2023 is the result of these internal reforms. It addresses not only the external demands of citizens and economic stakeholders, but also help to improve the management of activities in the field of potable water and effluent sanitation.

The objective of this 2023 edition is to outline the evolution of statistics pertaining to the operation of drinking water supply systems, marketing, human and financial resources over the period 2018-2022. As the field of effluent sanitation is still under construction, its data will be available in the next publication.

CAMWATER would like to take this opportunity to express its gratitude to the entire people that took part in the construction of this paper, particularly the National Institute of Statistics (NIS), the technical partner.

LE DIRECTEUR GENERAL



MC JSSA Blaise



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LIST OF ACRONYMS AND ABBREVIATIONS

SDB-CAMWATER	Statistical Database of CAMWATER
CAMWATER	Cameroon Water Utilities Corporation
CDS	Committee for the Development of Statistics
NQAF	National Statistical Quality Assurance Framework
DAI	Internal Audit Division
DAJM	Legal Affairs and Contracts Division
DC	Commercial Department
DCF	Accounting and Finance Department
DCG	Management Control Division
DCRF	Cooperation and Financing Research Division
DE	Operations Department
DEPA	Engineering Design, Planning and Sanitation Department
DICT	Information Technologies, Communication and Translation Division
DIM	Infrastructure and Maintenance Department
DPL	Assets and Logistics Department
DRDA	Regional Directorate of Douala Area
DRHAS	Human resources and Social Affairs Department
DRYA	Regional Directorate of Yaounde Area
SDCDA	Mail, Documentation and Archives Sub-Department
GESP	Growth and Employment Strategic Paper
PDHUC	Water Supply Master Plan for Urban and Suburban Areas in Cameroon
SIS	Statistical information system
NDS30	National Development Strategy 2020
NSDS30	National Strategy for the Development of Statistics 2021-2030
SDG	Sustainable Development Goals
NGO	Non-Governmental Organization

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CHAPTER 1

PRESENTATION OF THE YEARBOOK AND KEY CONCEPTS

1.1-Box on the use and relevance of the statistical yearbook

The Statistical Yearbook is the core paper of any statistical system. It summarizes the whole statistics produced by the said system by presenting them in an intelligent and usable way for the user.

In this respect, the CAMWATER statistical yearbook will certainly give more visibility to actions carried out by the public undertaking. It is a working document, not only for the governing bodies of CAMWATER, but also for all external users such as public and private administrations, development partners, researchers, academics, NGOs, civil society, etc.

The document guides the strategic and operational management of the company as well as the overall development of the drinking water and effluent sanitation subsector through good governance, research, innovation, financing and technical support.

It also helps to monitor and evaluate public policies at both national and international level, especially the national water policy, the NDS30 and the Sustainable Development Goals (SDGs), specifically SDG6.

1.2-Structure of the document

Besides introductory parts, annexes and preface, the Statistical Yearbook has seven (07) chapters:

- Chapter 1 deals with the presentation of the yearbook and key concepts. The reader gets acquainted with the role, architecture and terms dedicated specifically to the field of drinking water;
- Chapter 2 is the presentation of CAMWATER. The reader therefore learns more about the missions of the organization, its operation and institutional evolution;

- Chapter 3 presents the demand and need for drinking water at the national level;
- Chapter 4 presents statistics pertaining to the operation of drinking water supply systems, particularly the production, storage, distribution and water quality aspects;
- Chapter 5 focuses on commercial statistics referring to subscribers and the marketing of drinking water;
- Chapter 6 involves statistics of human resources
- Chapter 7 is about financial statistics

1.3-Key concepts and definitions

The following terminologies and concepts are related to the terms and definitions given in this document.

2018 data: The 2018 data covers the period of May to December 2018, thus taking into account the reform of the subsector that took place at that time.

Subscriber: Any natural person or legal entity holder of a subscription contract for water

Active subscriber: Any natural person or legal entity holder of a subscription contract for water not terminated

Inactive subscriber: Any natural person or legal entity holder of a subscription contract for water that has been terminated

Billable active subscribers: Active subscribers billed monthly.

Non-billable active subscriber: Active subscribers not yet receiving monthly bills.

Need for drinking water Volume of water to be collected from the natural environment on the peak day. It is obtained by adding the losses in distribution and production to the demand

served by the operator and the daily peak coefficient corrected. The amount of water a user would require for his usage or health, regardless of physical or economic constraints. It also refers to the amount of water required, over a given period, to fully satisfy known or estimated needs.

Demand for drinking water Volume of water consumed taking into consideration the synthesis of economic constraints and the assessment of the social and health value of water.

Equipped Centre: Centre with a drinking water supply system.

Centre in operation: Centre with functional and productive drinking water supply system.

Water released into the network: Volume of water sent into the distribution network for users.

Water released by the plant: Volume of water from production facilities and sent to storage facilities.

1.4-Methodology

Four (4) elements were used in the drafting of this yearbook, namely: (i) preparatory work, (ii) data collection and processing, (iii) drafting of the yearbook and (iv) release.

Preparatory work: (i) identification of needs in statistical information, (ii) Validation of needs, (iii) preparation of the statistical yearbook model and its validation, (iv) preparation and validation of data collection sheets.

Data collection and processing: implementation of collection tools, centralization of data collected and analysis. Excel was the main analytical tool used to centralize and produce tables, cross tables and graphs according to the nature of data.

Drafting of the yearbook: a summary of the relevant statistics was included in the yearbook at the beginning of each chapter. The different stages for the validation of the document have been taking into account.

Dissemination: After its reproduction and organization of a workshop to present the document to stakeholders and partners of the subsector, the dissemination took place in accordance with a distribution plan previously approved by the top management.

CHAPTER 2

THE PRESENTATION OF CAMWATER

2.1- Institutional evolution of CAMWATER

The Water and Sanitation Subsector has experienced several landscapes since the country's independence, as shown in the table below.

PERIOD	ORGANIZATION
1960-1964 :	<p>Several actors in the management and distribution of drinking water:</p> <ul style="list-style-type: none"> - Compagnie Centrale de Distribution d'Énergie Électrique (CCDEE): responsible for the management of water and electricity in Yaoundé, Maroua, Mbalmayo and Nkongsamba; - Société Eaux et Assainissement (SOCEA): responsible for the management of water in Douala; - Société Énergie Électrique du Cameroun (ENELCAM): responsible for the management of water and electricity in Dschang, Ebolowa, Edéa, Foumban and Kribi; - The water and electricity of the towns of Bafang, Bafia, Garoua, Mbanga and Sangmélima were managed by autonomous municipal authorities; - In 1963, about ten cities in Eastern Cameroon had an autonomous drinking water supply system.
1964-1967 :	Service Provisoire des Eaux du Cameroun (SPEC)
1967-2002 :	Société Nationale des Eaux du Cameroun (SNEC)
2002-2006 :	SNEC (under provisional administration)
2006-2008 :	CAMWATER
2008-2018 :	<p>Two main actors:</p> <ul style="list-style-type: none"> - CAMWATER: An asset holding company charged by Public authorities with responsibility for the development, rehabilitation and management of drinking water infrastructure in urban and suburban areas (concession contract); - Camerounaise Des Eaux: the leaseholder (a lease contract for the supply of drinking water in urban and suburban centres in Cameroon)
2018-to date	CAMWATER

2.2- Missions of CAMWATER

Under Decree No. 2018/144 of 20 April 2018, reorganizing CAMWATER, the state-owned company is responsible for the management of assets and rights accruing to potable water supply as a public utility, as well as the operation of the public service for the production, transport and distribution of drinking water in urban and suburban areas.

As such, CAMWATER is responsible for,

Regarding the management of assets and rights accruing to the public service of potable water supply:

- Planning, studies, project management, research and management of funding of all infrastructure and facilities needed to capture, produce, transport, store and distribute drinking water;
- Construction, maintenance, replacement

and management of infrastructure for the production, storage, transport and operation of drinking water;

- Information and awareness-raising for users of potable water and effluent sanitation services;
- Carrying out extension and rehabilitation works.

Regarding the operation of the public service for the production, transport and distribution of drinking water:

operation of facilities for the production, transport and distribution of drinking water;

production, transport and distribution of drinking water;

maintenance of water treatment infrastructure and activities related to the commercial domain such as meter reading, billing and revenue collection.

Furthermore, CAMWATER may:

- acquire, obtain and operate concessions, rights and privileges pertaining to its corporate purpose;

- ensure the construction and management of infrastructure related to the public service of effluent sanitation, including the collection, transport and treatment of wastewater;
- carry out all commercial, industrial, real estate securities and financial transactions related, directly or indirectly to the matter defined hereabove, likely to promote their development.

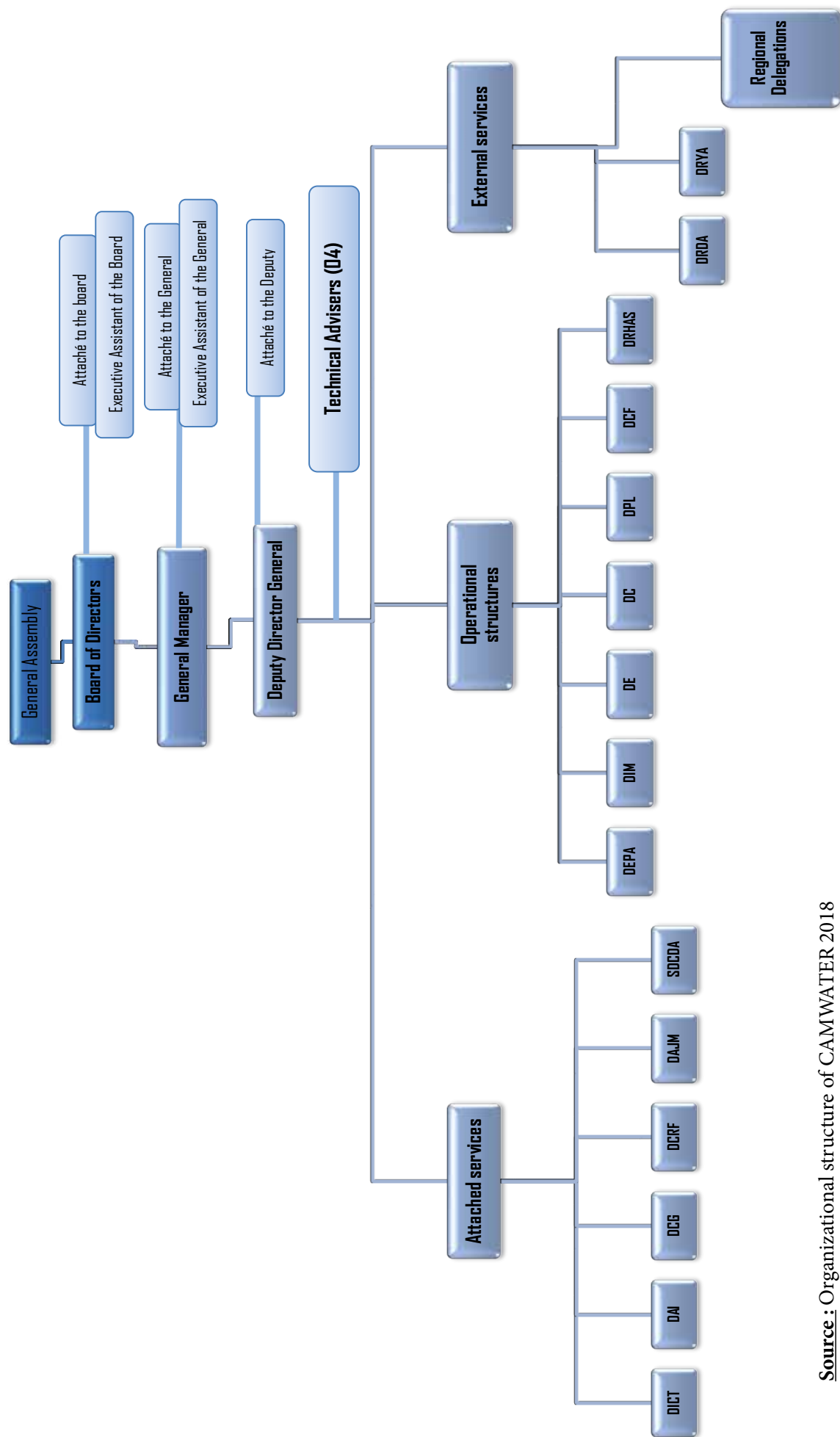
2.3-Functional organization of CAMWATER

For the fulfilment of its missions, the Cameroon Water Utilities Corporation, CAMWATER in short, has three (3) governing bodies, namely:

- The General Assembly of Shareholders;
- The Board of Directors;
- The General Management

This organization is mapped in the graph below.

Graph 1: Organizational chart of CAMWATER



Source : Organizational structure of CAMWATER 2018

CHAPTER 3

THE DEMAND FOR DRINKING WATER IN THE AREA UNDER CONCESSION

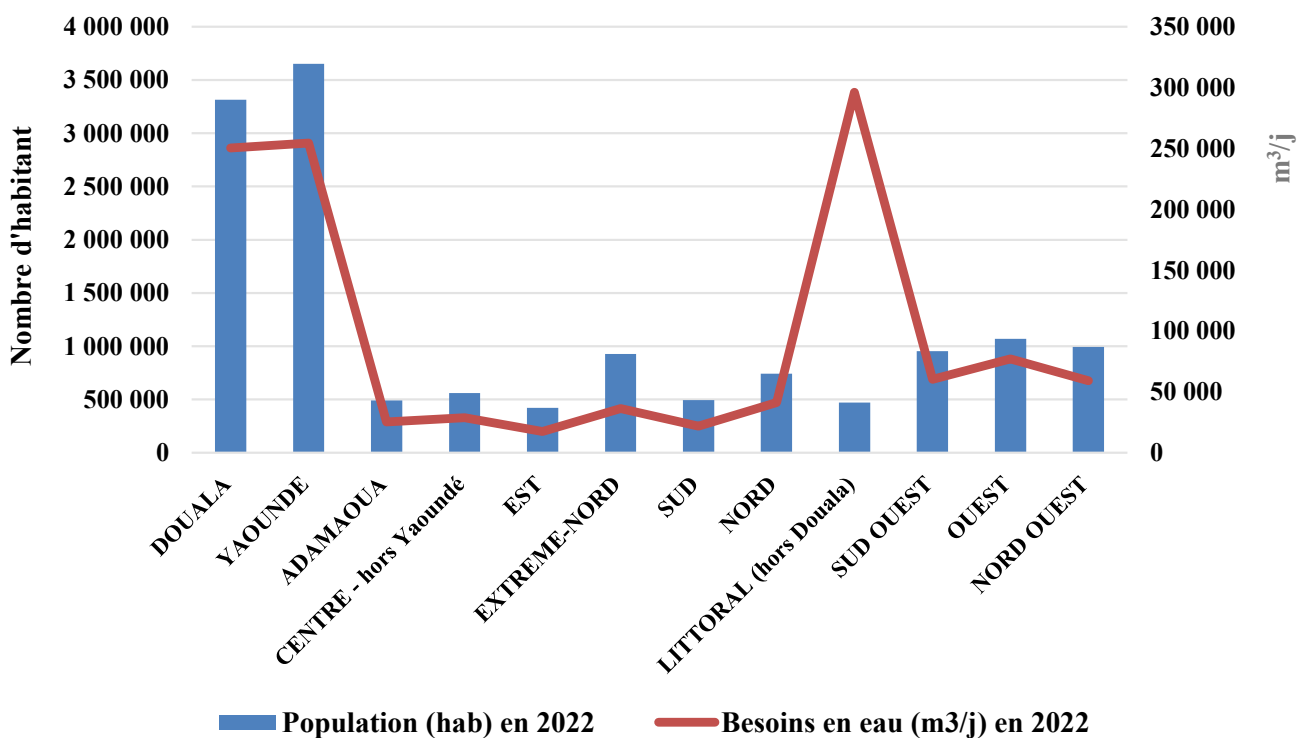
In Cameroon, the issue of drinking water supply is growing because of population growth and rapid urbanization in major cities. The determination and control of the dynamics of the volumes of water to be provided (depending on the demand for water) to meet the needs of the population is essential and fundamental.

Modelling of the demand function then becomes an indispensable tool for the orientation of public policies regarding the supply of water to the population. It therefore helps the

implementation at the operational level of the investments necessary to meet this demand.

The insufficient supply of drinking water is now facing an ever-increasing demand. According to the Water Supply Master Plan for Urban and Suburban Areas in Cameroon (PDHUC), the need for drinking water for 2022 is estimated at 1,168,749 m³/d for a population estimated at 14,091,764 inhabitants in the area under concession.

Graph 2: Estimated water needs (m³/d) and population (inhab.) of the concession area in 2022



Source : PDHUC 2013

CHAPTER 4

STATISTICS ON THE OPERATION OF DRINKING WATER SUPPLY SYSTEMS

3.1- Production and storage statistics

This section outlines the evolution of water production plants and storage reservoirs over the period 2018-2022. It also highlights operating centres and production performance over the same period through Table 1 and Graph 3.

As of December 31, 2022, CAMWATER has 117 centres in operation throughout the country.

Tableau 1: Nombre de centres en exploitation par Ville/Région

Structure/Region	Number of centres equipped	
	2021	2022
Regional Directorate of Douala Area (DRDA)	1	1
Regional Directorate of Yaounde Area (DRYA)	3	3
North Regional Delegation (DRN)	4	4
Adamawa Regional Delegation (DRA)	5	5
Far North Regional Delegation (DREN)	13	13
West Regional Delegation (DRO)	21	21
South West Regional Delegation (DRSO)	8	8
Centre Regional Delegation (DRC)	24	24
East Regional Delegation (DRE)	7	7
South Regional Delegation (DRS)	8	8
Littoral Regional Delegation (DRL)	12	12
North West Regional Delegation (DRNO)	11	11
Total	117	117

Source : CDS/ SDB-CAMWATER

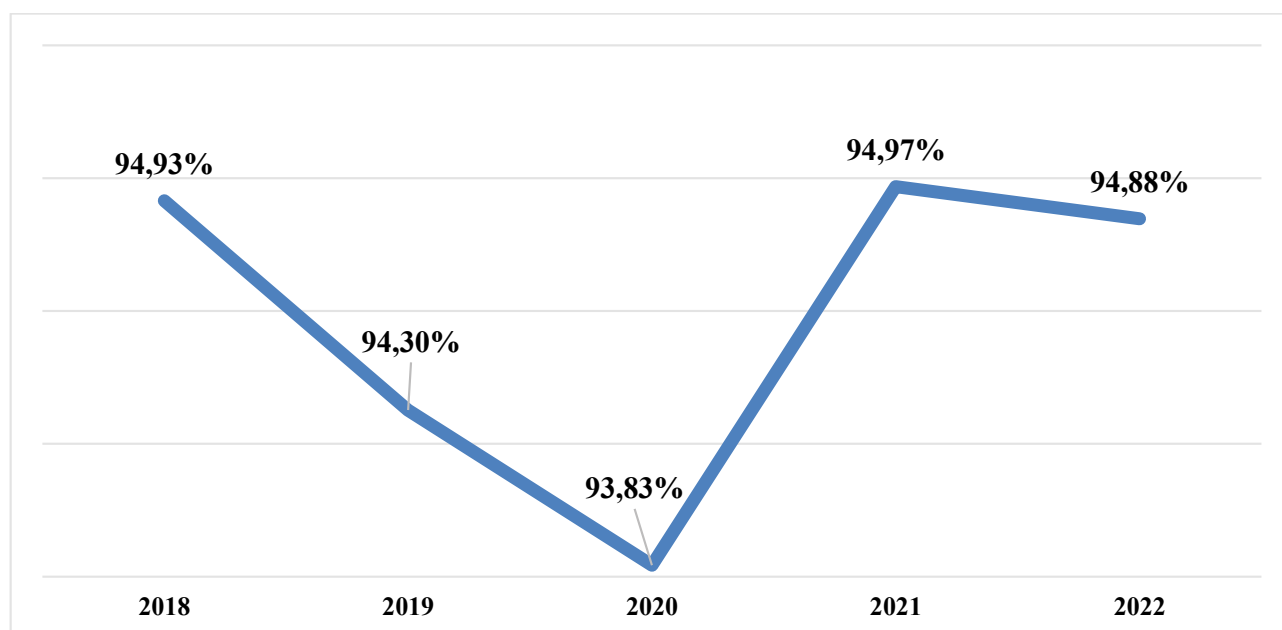
Table 2: List of centres equipped as of 31 December 2022 per Region/Structures

REGION/STRUCTURE													
DRDA	DRYA	DRN	DRA	DREN	DRO	DRSO	DRE	DRC	DRS	DRL	DRNO		
Douala	Yaounde	Garoua	Ngaoundere	Maroua	Bafoussam	Limbe	Abong-Mbang	Akono	Ambam	Nkongsamba	Bamenda		
	Soa	Guider	Meiganga	Mokolo	Bandjoun	Buea	Batouri	Akonolinga	Campo	Edea	Batibo		
	Mbankomo	Figuil	Tibati	Yagoua	Baham	Kumba	Belabo	Ayos	Kribi	Loum	Fundong		
		Mayo-Oulo	Banyo	Doukoula	Bafang	Tiko	Bertoua	Bafia	Ebolowa	Mbanga	Jakiri		
			Mbe	Kousseri	Bangangte	Mamfe	Yokadouma	Batchenga	Meyomessala	Njombe	Njikjem-Oku		
				Makari	Bankim	Muyuka	Dimako	Bikok	Sangmelima	Manjo	Kumbo		
				Mora	Bamendjou	Mundemba	Lomie	Bokito	Zoetele	Penja	Mbengui		
				Kolofata	Bazou	Nguti		Eseka	Djoum	Yabassi	Ndop		
				Maga	Dschang			Evodoula		Ngambe	Njimikom		
				Kaele	Foumban			Makak		Pouma	Nkambe		
				Koza	Foumbot			Makenene		Dizangue	Wum		
				Bogo	Mbouda			Matomb		Dibang			
				Tokombere	Melong			Mbalmayo					
				Logone Birni	Tonga			Mbandjock					
					Bansoa			Mfou					
					Bana			Monatele					
					Kekem			Nanga Eboko					
					Bayangam			Ngoumou					
					Bangoua			Ndikimimeki					
					Bangou			Obala					
					Batié			Okola					
								Bafia					
								Saa					
								Yoko					
TOTAL	1	3	4	14	21	8	7	24	8	12	11		

Source: CDS/BDS-CAMWATER

The production efficiency went from 94.93% in 2018 to 94.88% in 2022, an average annual rate of 94.58% between 2018 and 2022.

Graph 3: Evolution of the Production efficiency in percentage (%)



Source : CDS/ SDB-CAMWATER

Table 3: Evolution of the production capacity in cubic metres per day (m3/d)

Year	Production capacity	
	Installed	Operational
2018	781 080	577 005
2019	824 816	711 587
2020	823 848	663 557
2021	854 420	683 186
2022	858 190	686 456

Source: CDS/BDS-CAMWATER

Table 4: Evolution of the number of plants per type

Year	Number of plants	
	Treatment plant	Pumping station
2018	96	32
2019	99	39
2020	100	39
2021	114	43
2022	115	43

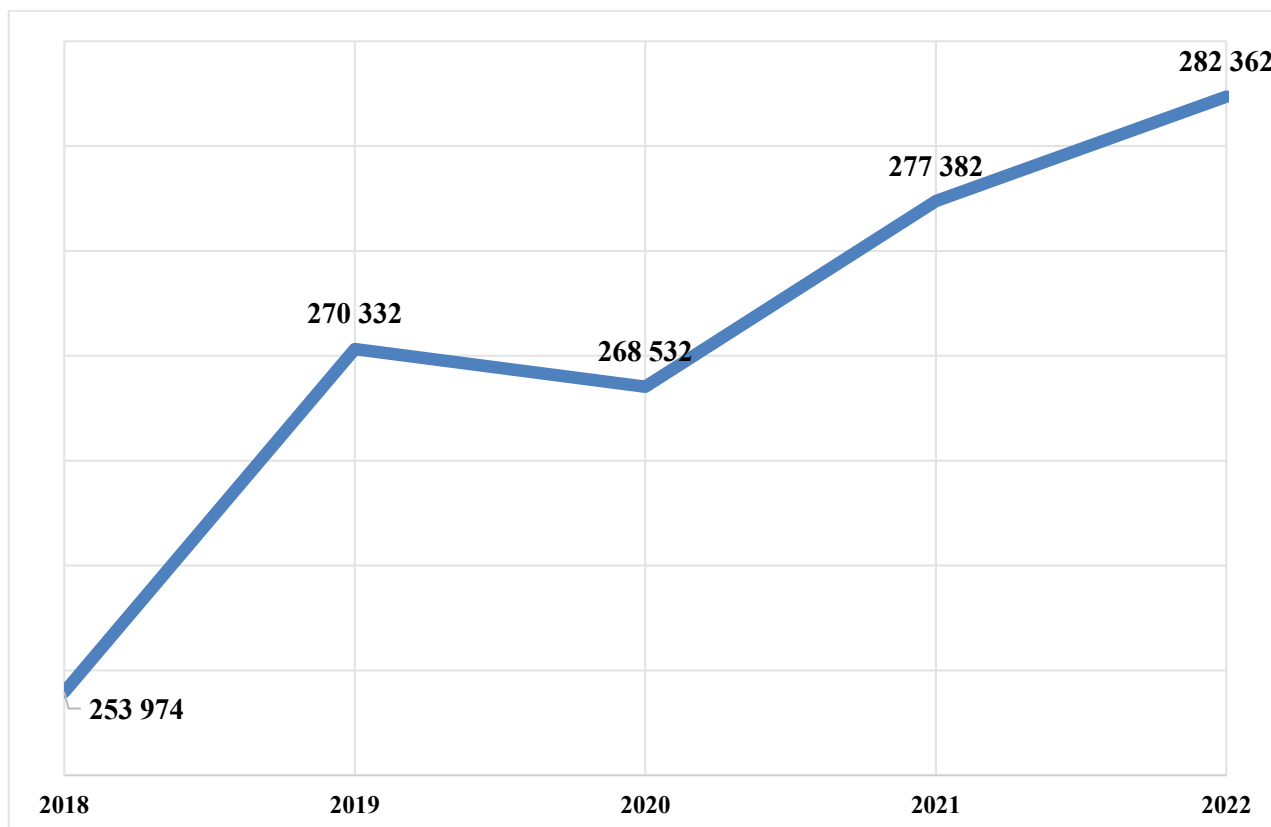
Source : CDS/BDS-CAMWATER

Table 5: Evolution of production capacities per region/city (m3/d)

City/Region	Installed Production capacity		Operational production capacity installed	
	2021	2022	2021	2022
Douala and the urban area	303 400	303 400	225 500	225 500
Yaounde and the urban area	239 570	239 570	192 070	192 070
North	25 440	25 440	24 744	22 752
Adamawa	17 090	17 180	13 230	13 140
Far North	32 010	32 010	26 186	26 186
West	71 816	71 816	59 542	59 542
South West	34 880	34 880	34 880	34 880
Centre (excluding Yaounde and the urban area)	16 234	16 234	13 410	13 410
East	11 660	14 480	9 340	13 960
South	26 200	27 060	25 496	26 228
Littoral (excluding Douala and the urban area)	41 440	41 440	27 328	27 328
North West	34 680	34 680	31 460	31 460
TOTAL	854 420	858 190	683 186	686 456

Source : CDS/BDS-CAMWATER

Graph 4: Evolution of the available storage capacity (m3)



Source : CDS/ SDB-CAMWATER

Table 6: Evolution of the available storage capacity per City/Region (m3)

City/Region	2021	2022
Douala and the urban area	67 900	67 900
Yaounde and the urban area	100 410	100 410
North	9 000	9 000
Adamawa	4 410	4 610
Far North	4 730	4 730
West	23 812	23 812
South West	14 404	14 404
Centre (excluding Yaounde and the urban area)	13 010	13 010
East	4 100	8 600
South	10 183	10 463
Littoral (excluding Douala and the urban area)	15 084	15 084
North West	10 339	10 339
TOTAL	277 382	282 362

Source : CDS/BDS-CAMWATER

Table 7: Evolution of volumes of water collected and produced (m3)

Year	Volume of water	
	Raw water collected	Water produced and released by plants and/or boreholes
2018	145 946 843	138 550 759
2019	211 817 625	199 747 955
2020	211 276 663	198 250 472
2021	209 683 740	199 146 102
2022	203 100 265	192 698 012

Source : CDS/ SDB-CAMWATER

Table 8: Volume of water collected and produced per City/Region (m3)

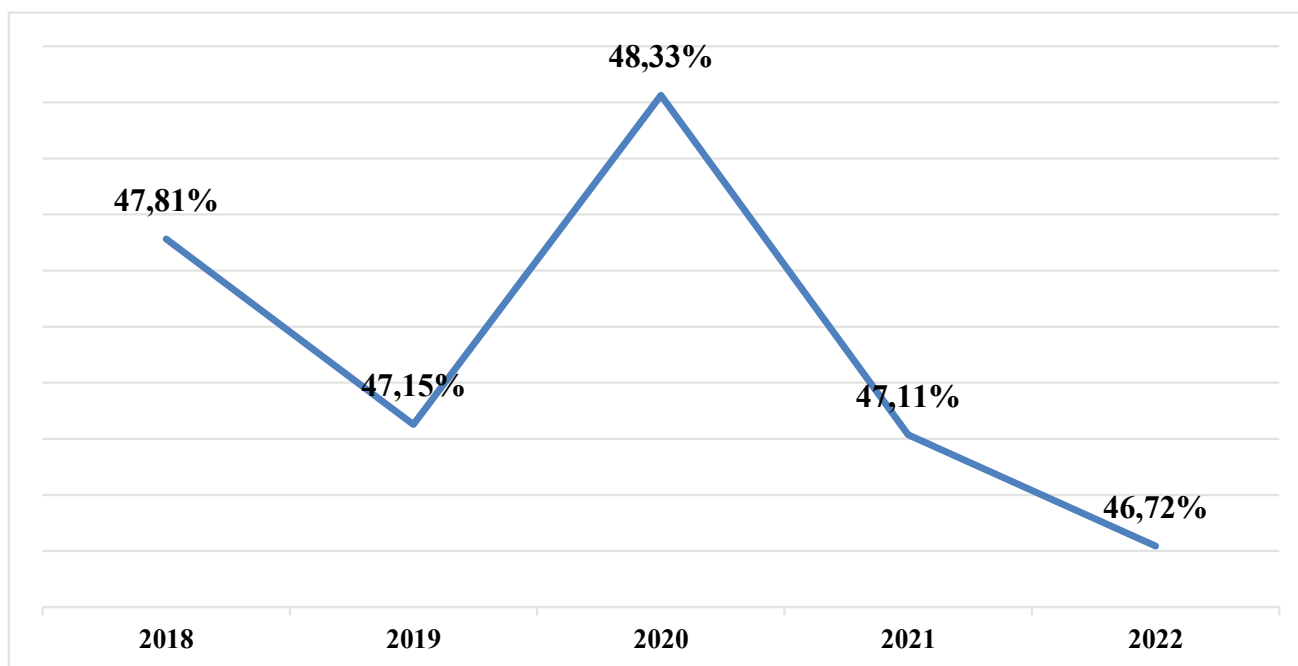
Structure/Region	Raw water collected					Water produced and released by plants/boreholes				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Douala and the urban area	53 440 194	80 904 445	80 310 466	81 509 647	78 391 969	50 950 293	75 938 550	74 416 379	77 443 585	74 530 371
Yaounde and the urban area	44 765 043	70 909 635	72 451 441	70 803 497	66 274 237	41 992 114	66 833 977	68 358 756	67 077 097	62 402 083
North	7 261 132	6 509 844	6 914 798	7 361 457	7 212 251	7 161 778	6 394 604	6 774 801	7 235 245	7 130 563
Adamawa	1 985 826	2 724 095	3 152 525	2 982 630	2 772 078	1 866 201	2 582 614	3 005 493	2 843 627	2 650 109
Far North	4 464 128	6 880 089	6 516 327	5 735 169	5 297 120	4 442 710	6 816 583	6 344 100	5 607 200	5 150 101
West	12 605 731	12 892 742	13 536 291	13 349 209	13 566 883	12 161 751	12 496 734	13 036 507	12 842 434	13 063 227
South West	6 570 461	12 310 712	11 210 745	10 151 857	9 774 299	6 184 073	11 233 018	10 327 274	9 481 332	9 453 632
Centre (excluding Yaounde and the urban area)	1 690 630	2 284 935	1 999 939	1 854 170	2 135 897	1 572 244	2 119 496	1 783 832	1 655 934	1 737 738
East	1 312 753	1 608 314	1 586 238	1 818 199	2 722 929	1 244 235	1 345 974	1 223 360	1 445 589	2 366 281
South	2 603 282	3 975 013	3 815 420	4 084 294	4 628 114	2 299 913	3 573 348	3 590 971	3 838 133	4 367 721
Littoral (excluding Douala and the urban area)	4 582 165	5 717 965	4 163 862	4 108 874	4 538 653	4 174 376	5 492 180	3 972 141	3 924 188	4 220 177
North West	4 665 499	5 099 836	5 618 613	5 924 738	5 785 836	4 501 071	4 920 877	5 416 859	5 751 738	5 626 009
TOTAL	145 946 843	211 817 625	211 276 663	209 683 740	203 100 265	138 550 759	199 747 955	198 250 472	199 146 102	192 698 012

Source: CDS/BDS-CAMWATE

3.2- Distribution statistics

This section presents the variables related to the performance of the distribution network. This performance is mostly measured by the distribution efficiency whose evolution is expressed in Graph 5. The distribution efficiency went from 47.81% in 2018 to 46.72% in 2022, an average annual efficiency of 47.42%.

Graph 5: Evolution of the Distribution efficiency (in %)



Source : CDS/BDS-CAMWATER

Table 9: Evolution of volumes of water released into the network and billed (m3)

Year	Water released into the network	Water billed
2018	127 223 833	60 829 483
2019	198 335 093	93 518 364
2020	198 250 472	95 805 062
2021	199 146 102	93 826 520
2022	192 698 012	90 024 141

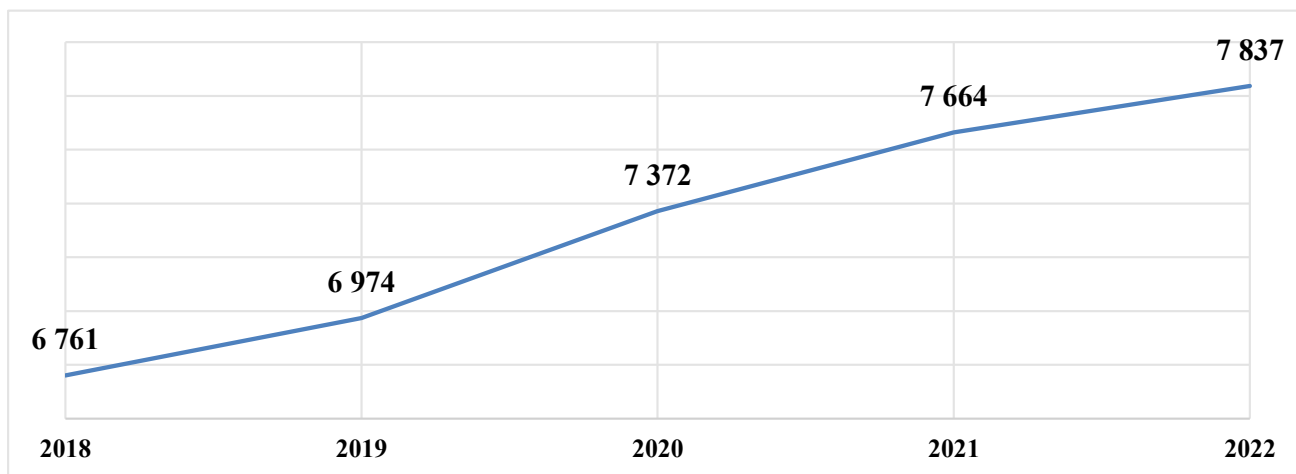
Source : CDS/BDS-CAMWATER

Table 10: Volumes of water released into the network and billed per City/Region (m3)

Structure/Region	Water released into the network					Water billed				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Douala and the urban area	50 950 293	75 938 550	74 416 379	77 443 585	74 530 371	18 673 159	30 117 164	30 750 507	29 648 145	28 165 750
Yaounde and the urban area	41 322 157	65 904 701	67 336 743	66 068 363	61 391 291	21 720 574	32 075 365	32 160 040	32 474 839	29 774 666
North	7 161 778	6 395 277	6 774 801	7 235 245	7 130 563	4 608 995	4 772 566	5 024 350	4 654 366	4 545 282
Adamawa	1 866 201	2 582 614	3 005 493	2 843 627	2 650 109	1 411 970	2 063 672	2 260 330	2 161 916	1 991 764
Far North	4 442 710	6 816 583	6 344 100	5 607 200	5 150 101	2 322 902	3 653 093	3 917 145	3 229 471	3 095 252
West	12 161 751	12 496 734	13 024 120	12 864 210	13 067 457	7 874 751	7 649 436	7 650 878	7 981 781	8 551 906
South West	6 184 073	11 233 018	10 327 274	9 481 332	9 453 632	3 373 722	4 727 511	5 118 345	4 375 322	4 532 494
Centre (excluding Yaounde and the urban area)	2 496 328	3 024 136	2 805 845	2 664 668	2 748 530	1 306 964	1 374 772	1 411 300	1 379 997	1 391 329
East	1 244 235	1 361 510	1 223 360	1 445 589	2 366 281	772 762	827 178	632 318	732 075	1 038 896
South	2 299 913	3 573 348	3 590 971	3 838 133	4 367 721	1 542 447	1 596 664	1 942 173	2 422 825	2 621 918
Littoral (excluding Douala and the urban area)	4 174 376	4 087 745	3 984 528	3 902 412	4 215 947	2 230 176	2 490 663	2 804 888	2 644 248	2 441 640
North West	4 501 071	4 920 877	5 416 859	5 751 738	5 626 009	2 775 061	2 170 280	2 132 788	2 121 536	1 873 244
TOTAL	138 804 886	198 335 093	198 250 472	199 146 102	192 698 012	68 613 483	93 518 364	95 805 062	93 826 520	90 024 141

Source: CDS/BDS-CAMWATER

Graph 6: Evolution of the network linear (in km)



Source : CDS/BDS-CAMWATER

Table 11: Network linear per City/Region (in km)

Structure/Region	2021	2022
Douala and the urban area	1 536,338	1 546,924
Yaounde and the urban area	1 685,340	1 685,340
North	331,519	335,698
Adamawa	196,509	196,509
Far North	444,141	444,141
West	1 363,630	1 365,130
South West	383,369	383,369
Centre (excluding Yaounde and the urban area)	462,940	462,940
East	130,645	259,945
South	212,053	239,423
Littoral (excluding Douala and the urban area)	449,634	449,634
North West	467,975	467,975
TOTAL	7 664,094	7 837,031

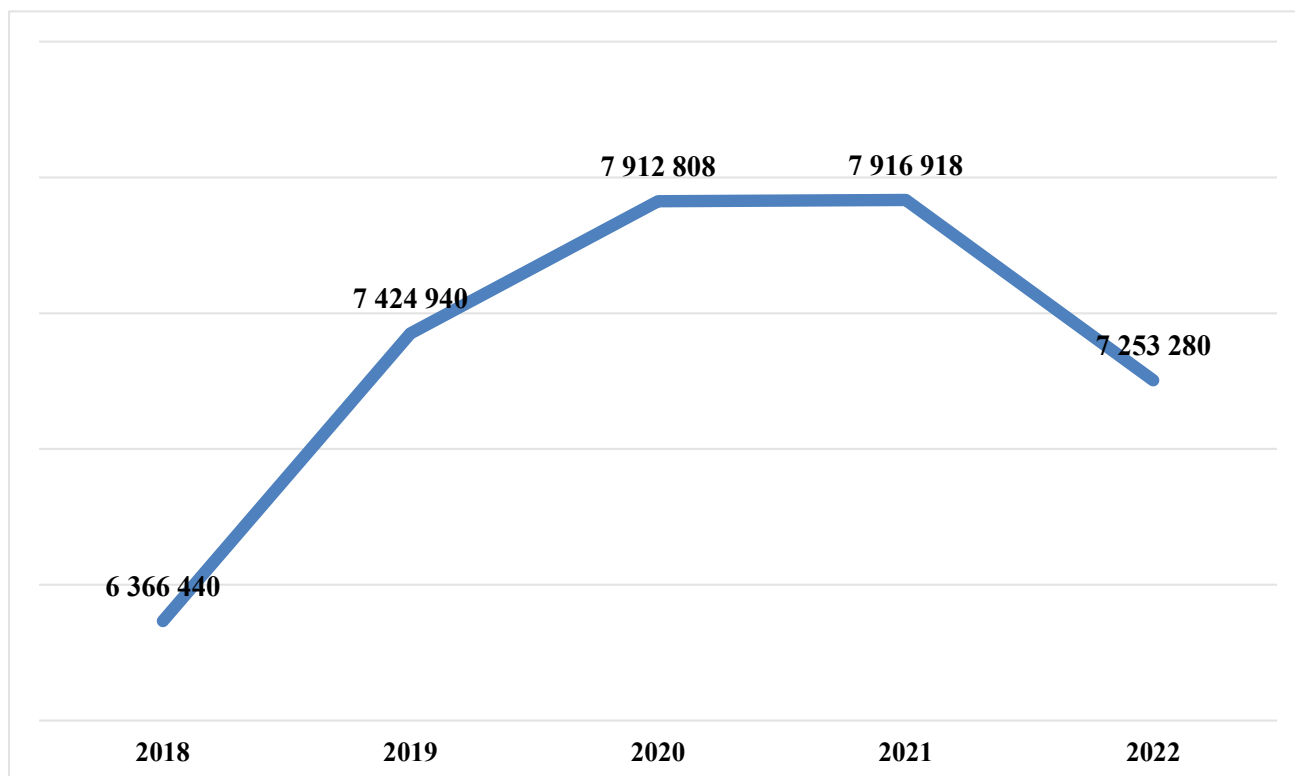
Source : CDS/BDS-CAMWATER

3.3- Water quality statistics

The data presented in this section provide an overview of the types and amounts of treatment product used to purify water collected. They

also highlight the conformity of water produced from the production plants. The control of the conformity of these analyses is done with external laboratories, partners of CAMWATER.

Graph 7: Total amounts of water treatment chemicals used (kg)



Source : CDS/BDS-CAMWATER

Table 12: Evolution of the amounts of water treatment products consumed per type of product (kg)

TYPE	2021	2022
Aluminium sulphate	4 934 076	4 429 851
Calcium hypochlorite	1 202 045	1 283 246
Calcium hypochlorite	3 048	2 429
Sodium hypochlorite	2 993	2 819
Calcium hydroxide	1 244 237	895 328
Purifloc	49 948	66 775
Sodium carbonate	193 583	163 377
Copper sulphate	70	-
Potassium permanganate	-	-
Citric acid	1 919	1 860
Ultrasil	-	-
Permaclean 33	30	104
Permaclean 67	42	52
Ferric chloride	261 581	372 496
HTH in post-chlorination	-	-
Sodium hydroxide	28 696	32 145
Hydrogen peroxide	-	-
Sodium thiosulphate	-	-
Sulphuric acid	691	776
TOTAL PRODUCTS USED	7 916 918	7 251 258

Source : CDS/BDS-CAMWATER

Table 13: Evolution of the amounts of water treatment products consumed per city/region

Structure/Region	2021	2022
Regional Directorate of Douala Area (DRDA)	1 954 397	1 659 965
Regional Directorate of Yaounde Area (DRYA)	4 521 767	4 465 629
North Regional Delegation (DRN)	48 901	55 879
Adamawa Regional Delegation (DRA)	72 063	59 281
Far North Regional Delegation (DREN)	42 449	51 016
West Regional Delegation (DRO)	349 495	383 479
South West Regional Delegation (DRSO)	28 521	29 465
Centre Regional Delegation (DRC)	160 639	147 875
East Regional Delegation (DRE)	108 032	186 595
South Regional Delegation (DRS)	421 251	423 786
Littoral Regional Delegation (DRL)	105 732	119 632
North West Regional Delegation (DRNO)	101 650	92 442
TOTAL	7 916 918	7 253 280

Source : CDS/BDS-CAMWATER

Table 14 Evolution of drinking water conformity rates per type of analysis (%)

Year	Bacteriological tests	Physico-chemical tests
2018	97	95
2019	96	94
2020	95	85
2021	91	75
2022	87	73

Source : CDS/BDS-CAMWATER

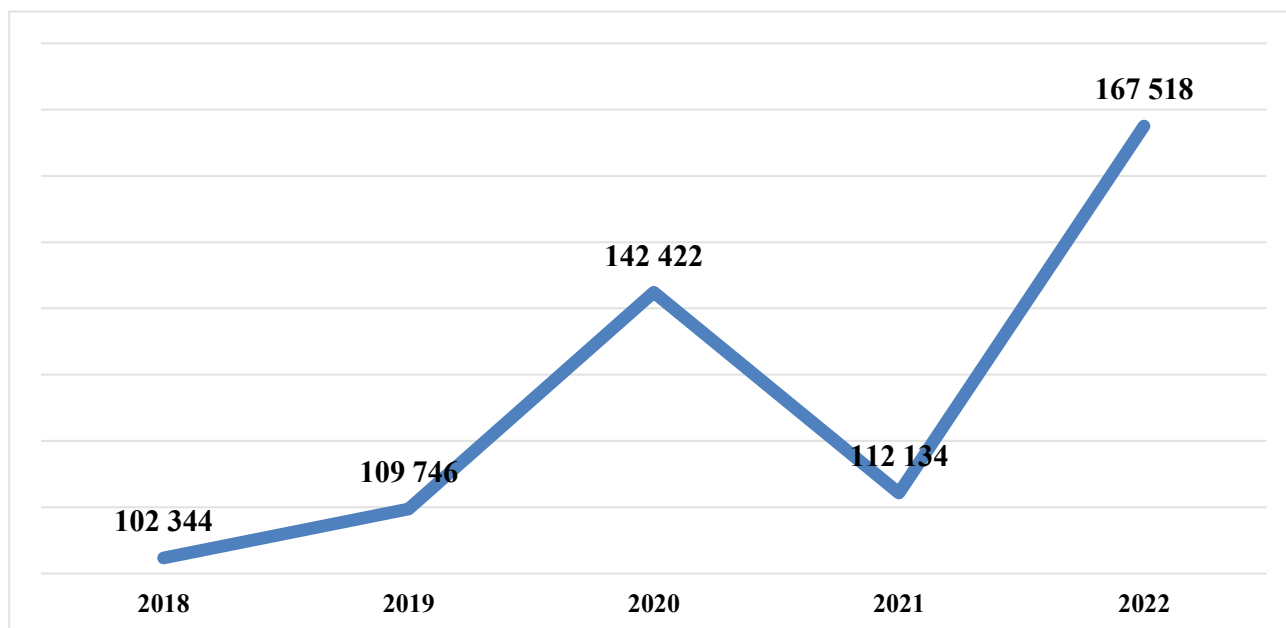
Table 15: Conformity rate of drinking water tests per type of analysis and per City/Region (%)

Structure/Region	Bacteriological tests				Physico-chemical tests					
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Regional Directorate of Douala Area (DRDA)	98,70	99,43	99,62	94,46	90,58	97,24	95,99	96,05	84,46	74,58
Regional Directorate of Yaounde Area (DRYA)	96,98	99,32	98,50	97,20	90,68	96,45	96,46	77,50	69,00	66,31
North Regional Delegation (DRN)	100,00	98,17	81,40	95,24	72,73	100,00	96,33	93,02	100,00	100,00
Adamawa Regional Delegation (DRA)	99,06	88,51	100,00	86,67	91,67	97,17	100,00	97,37	100,00	91,67
Far North Regional Delegation (DREN)	93,88	87,74	91,67	...	80,39	100,00	99,06	100,00	...	92,16
West Regional Delegation (DRO)	98,44	99,28	97,86	82,68	88,16	95,64	96,39	81,28	79,59	80,26
South West Regional Delegation (DRSO)	96,12	93,55	71,19	59,65	98,65	94,66	98,39	80,51	61,4	91,89
Centre Regional Delegation (DRC)	86,92	84,21	86,67	60,87	38,46	73,30	78,42	55,38	39,13	30,77
East Regional Delegation (DRE)	95,35	85,71	81,58	60,87	80,95	83,72	96,43	97,37	78,26	80,95
South Regional Delegation (DRS)	93,53	98,06	96,67	80,00	92,59	85,78	91,26	75,00	61,25	80,95
Littoral Regional Delegation (DRL)	95,29	90,99	87,34	72,88	80,65	90,59	77,68	74,68	69,49	63,44
North West Regional Delegation (DRNO)	93,55	100,00	95,08	96,55	...	93,87	96,97	100,00	100,00	...

Source: CDS/BDS-CAMWATER

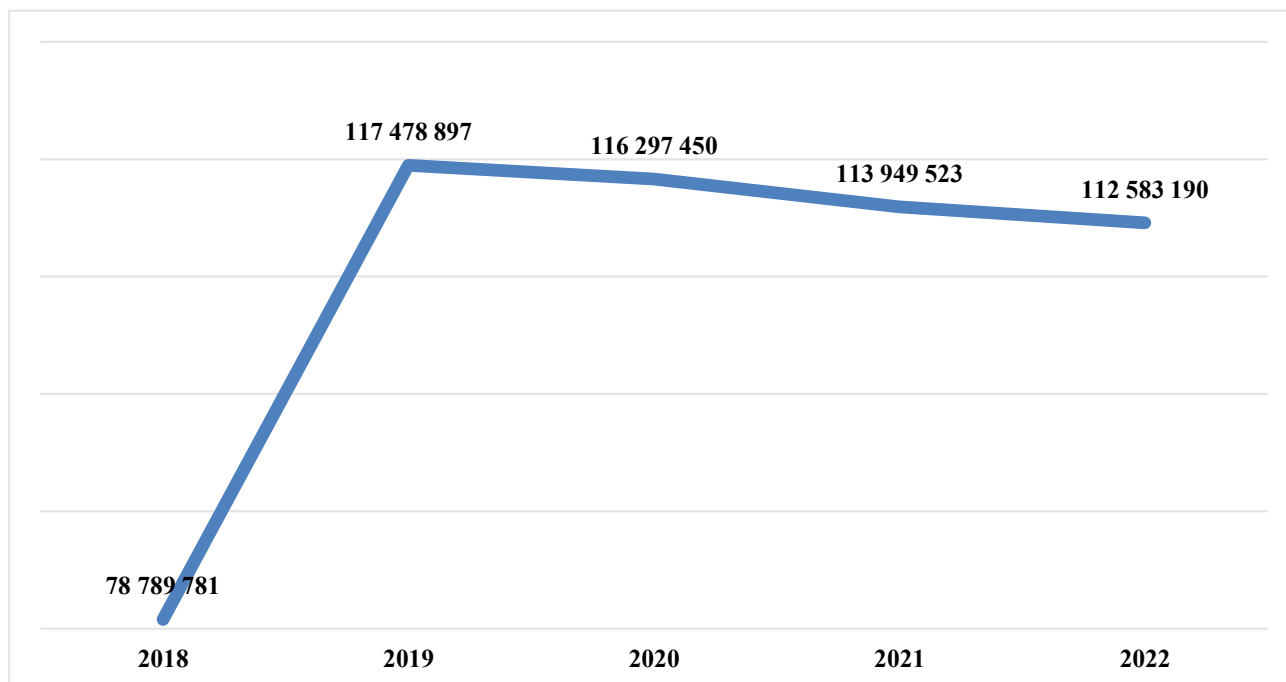
3.4- Energy consumption statistics

Graph 8: Evolution of diesel consumption in litres (l)



Source : CDS/BDS-CAMWATER

Graph 9: Evolution of electricity consumption in Kilowatt (Kw)



Source : CDS/BDS-CAMWATER

Table 16 Evolution of the level of energy consumption per type and per city/region

Structure/Region	Diesel (l)				Electricity (KW)					
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Regional Directorate of Douala Area (DRDA)	0	0	0	0	0	19 918 603	30 756 990	30 122 901	30 339 733	29 857 567
Regional Directorate of Yaounde Area (DRYA)	45 587	0	18 929	11 019	12 272	35 571 559	58 133 714	59 275 279	58 034 991	52 744 724
North Regional Delegation (DRN)	0	2 500	7 600	9 220	4 479	3 371 006	3 556 270	2 821 347	2 709 193	2 883 265
Adamawa Regional Delegation (DRA)	3 229	5 005	7 849	7 895	8 688	1 718 691	2 560 856	2 579 559	2 330 490	2 167 789
Far North Regional Delegation (DREN)	1 861	23 079	9 046	18 265	27 179	1 649 432	2 999 570	2 114 654	1 953 535	2 255 543
West Regional Delegation (DRO)	3 881	3 260	3 432	784	3 166	10 534 861	10 855 976	12 288 411	11 580 376	13 847 881
South West Regional Delegation (DRSO)	0	0	1 925	3 775	380	1 310 293	1 978 125	1 520 506	1 281 830	1 803 054
Centre Regional Delegation (DRC)	36 226	42 569	47 013	34 840	30 900	1 356 766	1 726 104	1 460 555	1 478 864	1 589 508
East Regional Delegation (DRE)	0	0	0	0	0	675 563	746 150	640 233	817 984	1 186 597
South Regional Delegation (DRS)	11 560	27 702	31 280	24 216	68 835	1 674 985	2 424 353	2 607 934	2 834 370	2 972 895
Littoral Regional Delegation (DRL)	0	0	0	0	6 790	602 398	724 130	627 375	394 194	1 014 890
North West Regional Delegation (DRNO)	0	5 631	15 348	2 121	4 828	405 624	1 016 659	238 696	193 963	259 477
TOTAL	102 344	109 746	142 422	112 134	167 518	78 789 781	117 478 897	116 297 450	113 949 523	112 583 190

Source : CDS/BDS-CAMWATER

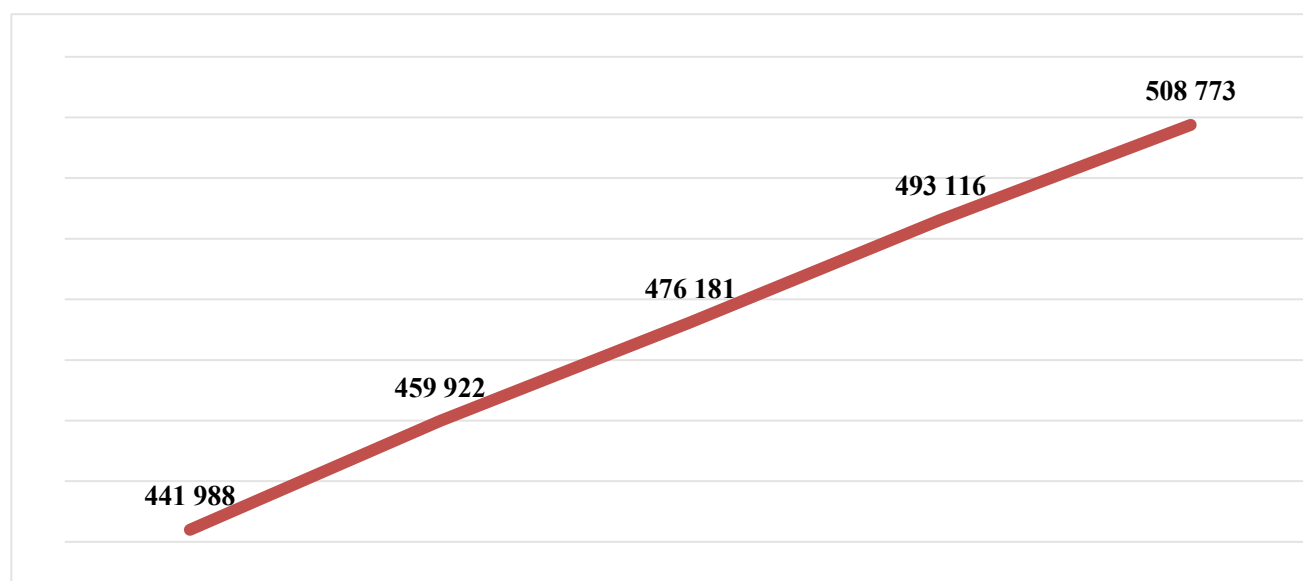
CHAPTER 5

COMMERCIAL STATISTICS

5.1-Subscribers

This section highlights the segmentation and composition of CAMWATER's customer portfolio..

Graph 10: Evolution of the number of active subscribers (n)



Source : CDS/BDS-CAMWATER

Table 17: Evolution of the number of active subscribers per categories

Types of active subscribers	2018	2019	2020	2021	2022
Privates	426 149	444 082	460 083	476 886	492 433
Pay standpipes	2 790	2 837	2 869	2 907	2 929
Administrations	7 489	7 608	7 828	7 928	8 041
Municipal buildings	545	552	562	571	580
Municipal standpipes	187	190	197	200	198
Large consumers	767	760	750	746	749
Workers and services of AES SONEL/ ENEO	2 218	2 065	2 058	2 035	2 002
Workers and services of CDE/ CAMWATER	1 843	1 828	1 834	1 843	1 841
TOTAL	441 988	459 922	476 181	493 116	508 773

Source : CDS/BDS-CAMWATER

Table 18: Evolution of the number of active subscribers per billing status

Year	Billed	Unbilled	Total
2018	355 229	86 759	441 988
2019	367 483	92 439	459 922
2020	376 311	99 870	476 181
2021	377 983	115 133	493 116
2022	382 383	126 390	508 773

Source : CDS/BDS-CAMWATER

Table 19: Billed subscribers per region/city

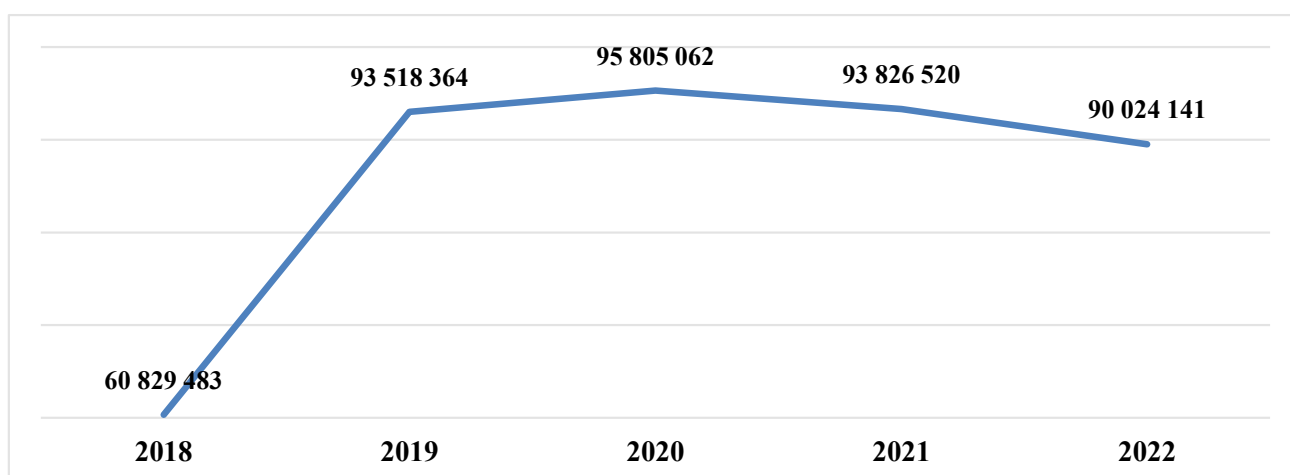
Structure/Region	Year	
	2021	2022
Regional Directorate of Douala Area (DRDA)	99 915	101 423
Regional Directorate of Yaounde Area (DRYA)	102 660	106 495
North Regional Delegation (DRN)	14 687	14 740
Adamawa Regional Delegation (DRA)	9 354	9 126
Far North Regional Delegation (DREN)	16 614	16 603
West Regional Delegation (DRO)	47 966	47 433
South West Regional Delegation (DRSO)	23 369	23 737
Centre Regional Delegation (DRC)	10 493	10 103
East Regional Delegation (DRE)	3 708	4 293
South Regional Delegation (DRS)	6 606	7 134
Littoral Regional Delegation (DRL)	20 927	20 613
North West Regional Delegation (DRNO)	21 684	20 683
TOTAL	377 983	382 383

Source : CDS/BDS-CAMWATER

5.2-Marketing

The commercial aspects of this section highlight the water billed and recoveries undertaken.

Graph 11: Evolution of the volumes of water billed (m3)



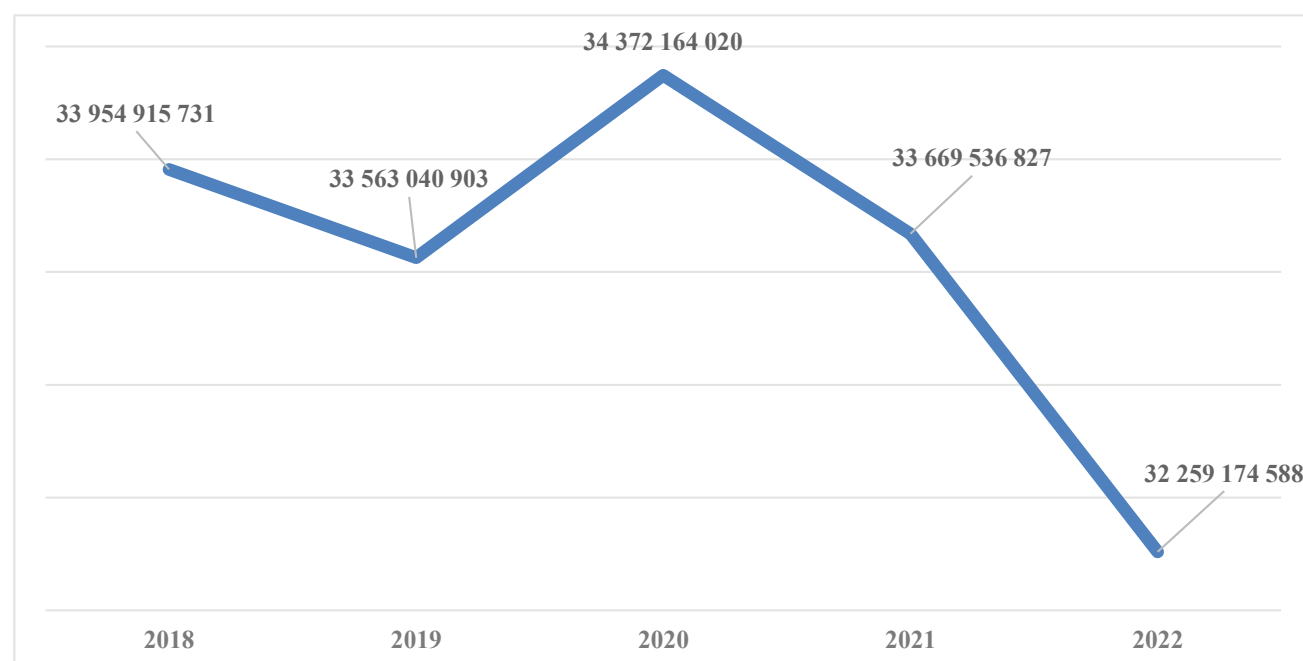
Source : CDS/BDS-CAMWATER

Table 20: Evolution of the volume of water billed per region/city (m3)

Structure/Region	2018	2019	2020	2021	2022
Regional Directorate of Douala Area (DRDA)	18 666 329	30 117 164	30 750 507	29 648 145	28 165 750
Regional Directorate of Yaounde Area (DRYA)	21 738 119	32 075 365	32 160 040	32 474 839	29 774 666
North Regional Delegation (DRN)	2 931 173	4 772 566	5 024 350	4 654 366	4 545 282
Adamawa Regional Delegation (DRA)	1 403 056	2 063 672	2 260 330	2 161 916	1 991 764
Far North Regional Delegation (DREN)	2 321 709	3 653 093	3 917 145	3 229 471	3 095 252
West Regional Delegation (DRO)	4 873 983	7 649 436	7 650 878	7 981 781	8 551 906
South West Regional Delegation (DRSO)	3 366 756	4 727 511	5 118 345	4 375 322	4 532 494
Centre Regional Delegation (DRC)	846 989	1 374 772	1 411 300	1 379 997	1 391 329
East Regional Delegation (DRE)	529 479	827 178	632 318	732 075	1 038 896
South Regional Delegation (DRS)	985 497	1 596 664	1 942 173	2 422 825	2 621 918
Littoral Regional Delegation (DRL)	1 442 102	2 490 663	2 804 888	2 644 248	2 441 640
North West Regional Delegation (DRNO)	1 672 351	2 170 280	2 132 788	2 121 536	1 873 244
TOTAL	60 777 543	93 518 364	95 805 062	93 826 521	90 024 141

Source : CDS/BDS-CAMWATER

Graph 12: Evolution of water sale (FCFA)

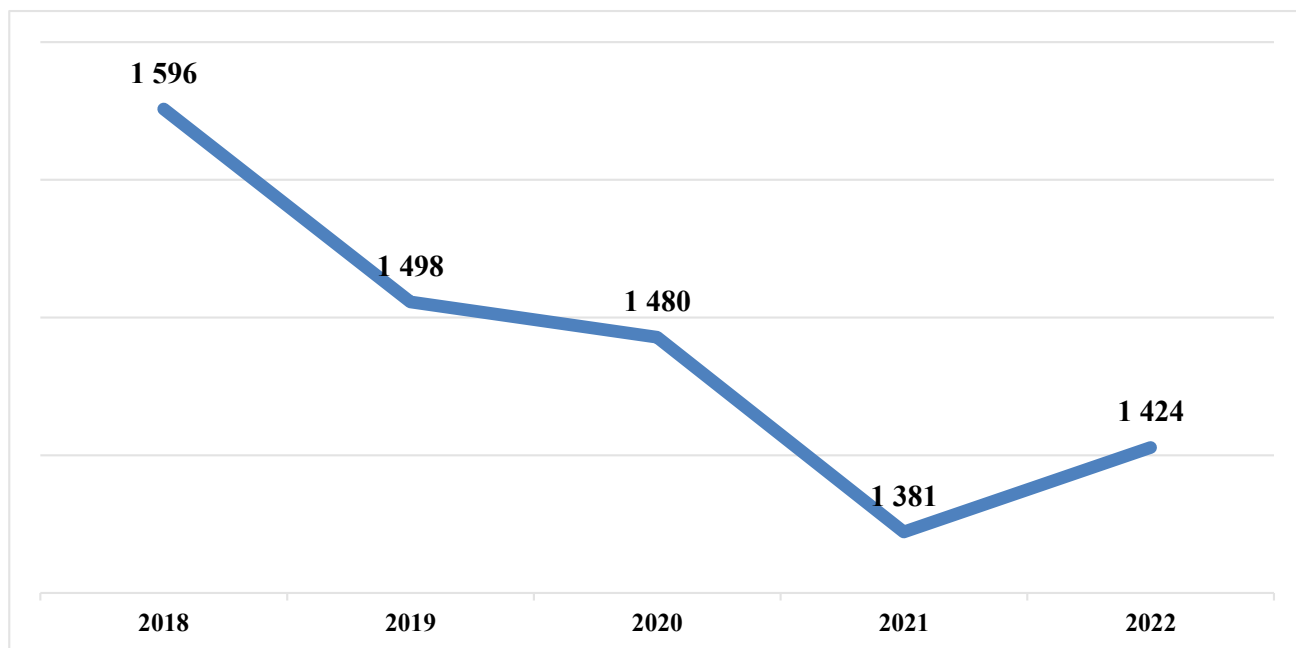


Source : CDS/BDS-CAMWATER

CHAPTER 6

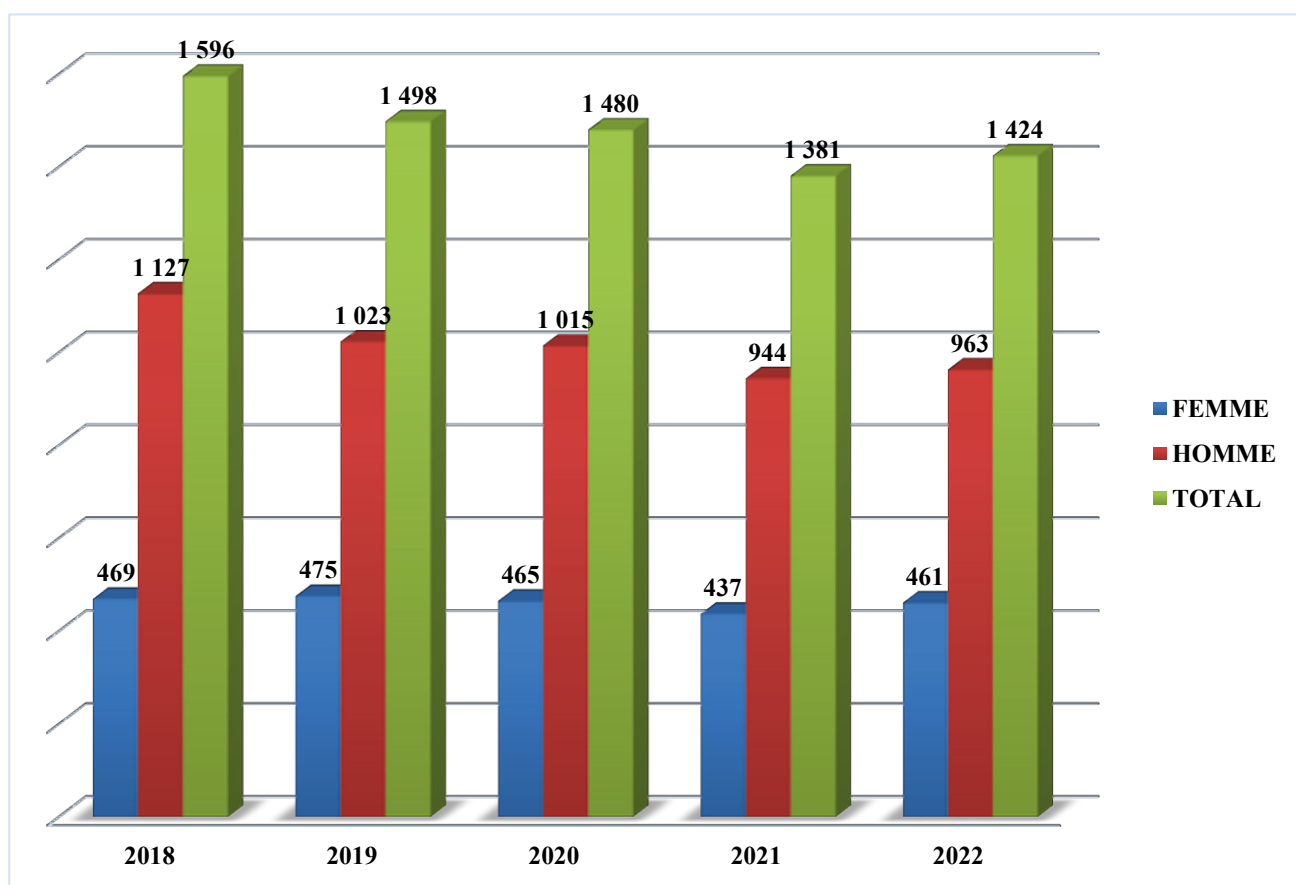
HUMAN RESOURCES AND FINANCE STATISTICS

Graph 13: Evolution of the total number of CAMWATER Staff



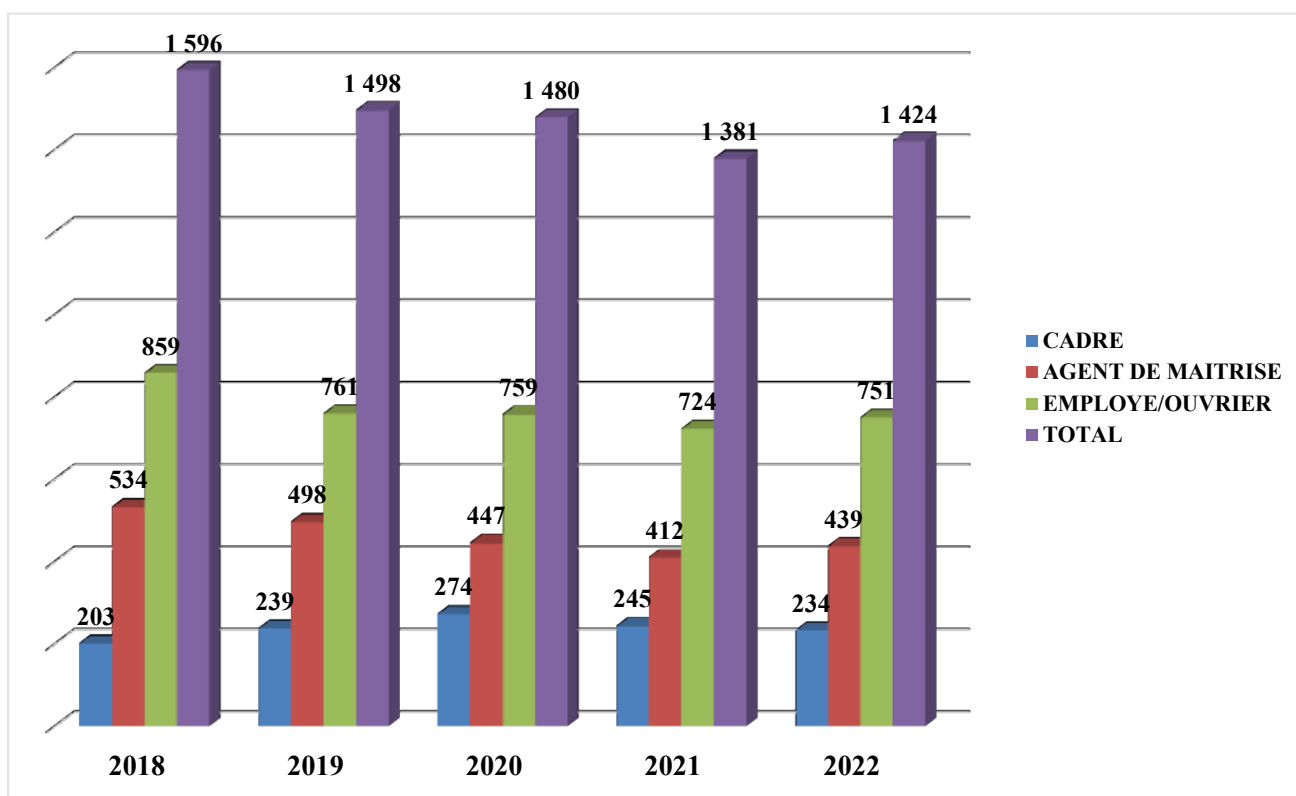
Source : CDS/BDS-CAMWATER

Graph 14: Evolution of the number of CAMWATER Staff per gender



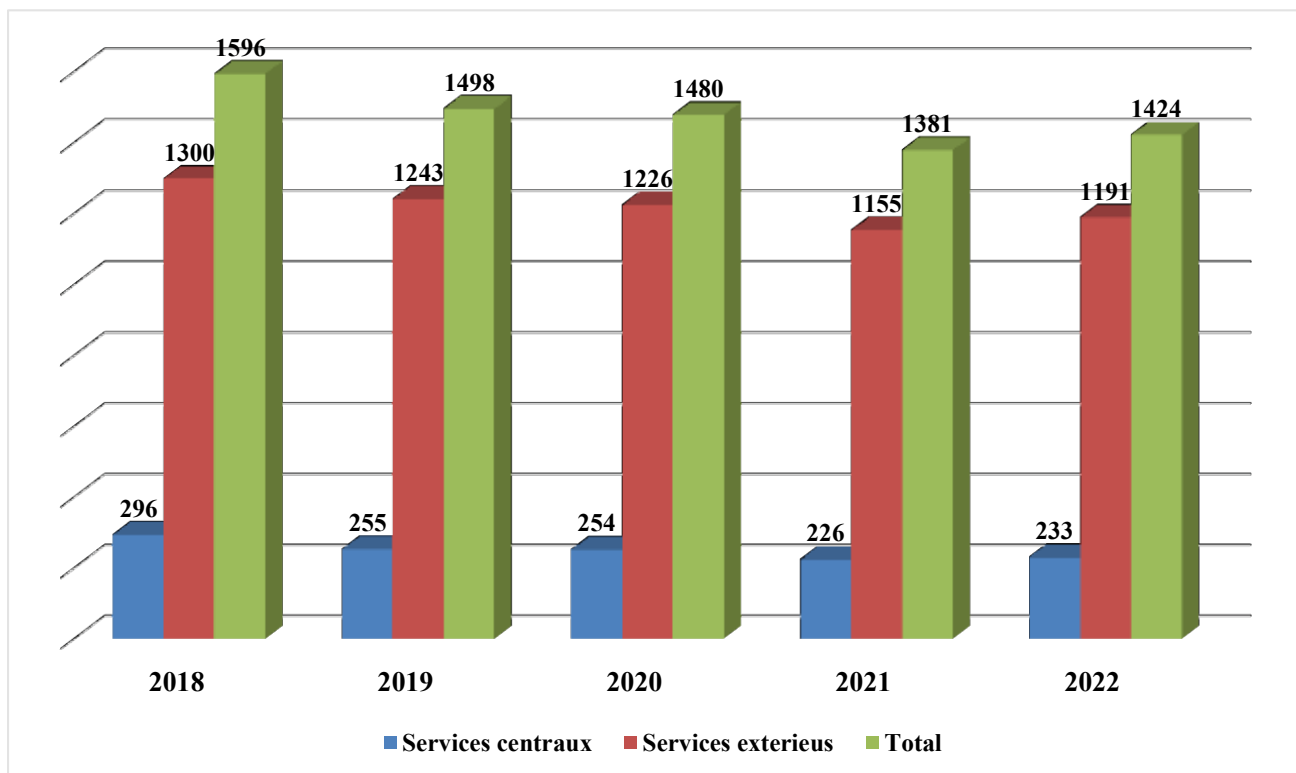
Source: CDS/BDS-CAMWATER

Graph 15: Evolution of the number of CAMWATER Staff per qualification



Source : CDS/BDS-CAMWATER

Graph 16: Evolution of the number of CAMWATER Staff per service type



Source : CDS/BDS-CAMWATER

Table 21: Evolution of the number of CAMWATER Staff per service type and qualification

Year	Central Services				External Service				TOTAL
	SENIOR STAFF	INTER-MEDIATE STAFF	JUNIOR STAFF	TOTAL	SENIOR STAFF	INTER-MEDIATE STAFF	JUNIOR STAFF	TOTAL	
2018	100	142	54	296	103	392	805	1 300	1 596
2019	112	97	46	255	127	401	715	1 243	1 498
2020	124	85	45	254	150	362	714	1 226	1 480
2021	112	71	43	226	133	341	681	1 155	1 381
2022	109	84	40	233	125	355	711	1 191	1 424

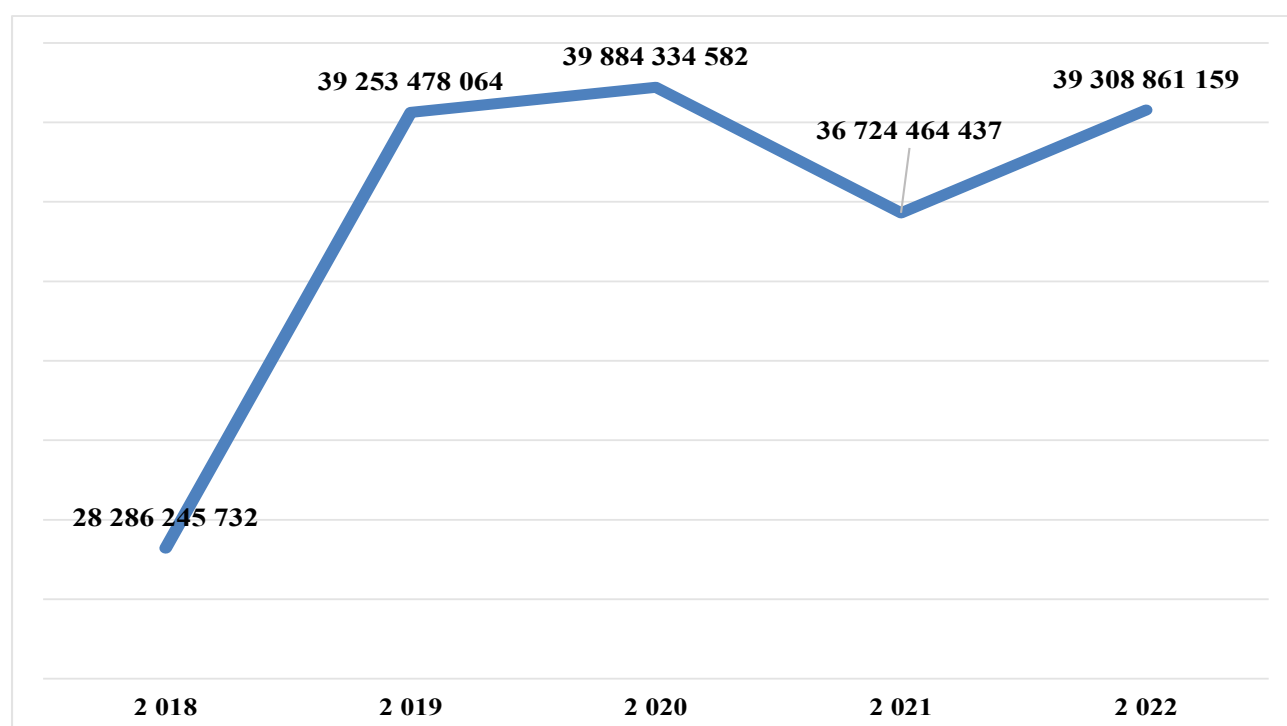
Source : CDS/BDS-CAMWATER

Table 22: Evolution of the number of Staff per gender and professional category

Year	GENDER	SENIOR STAFF	INTERMEDIATE STAFF	JUNIOR STAFF	TOTAL
2018	FEMALE	68	219	182	469
	MALE	135	315	677	1127
2019	FEMALE	84	218	173	475
	MALE	155	280	588	1023
2020	FEMALE	88	201	176	465
	MALE	186	246	583	1015
2021	FEMALE	75	190	172	437
	MALE	170	222	552	944
2022	FEMALE	73	206	182	461
	MALE	161	233	569	963

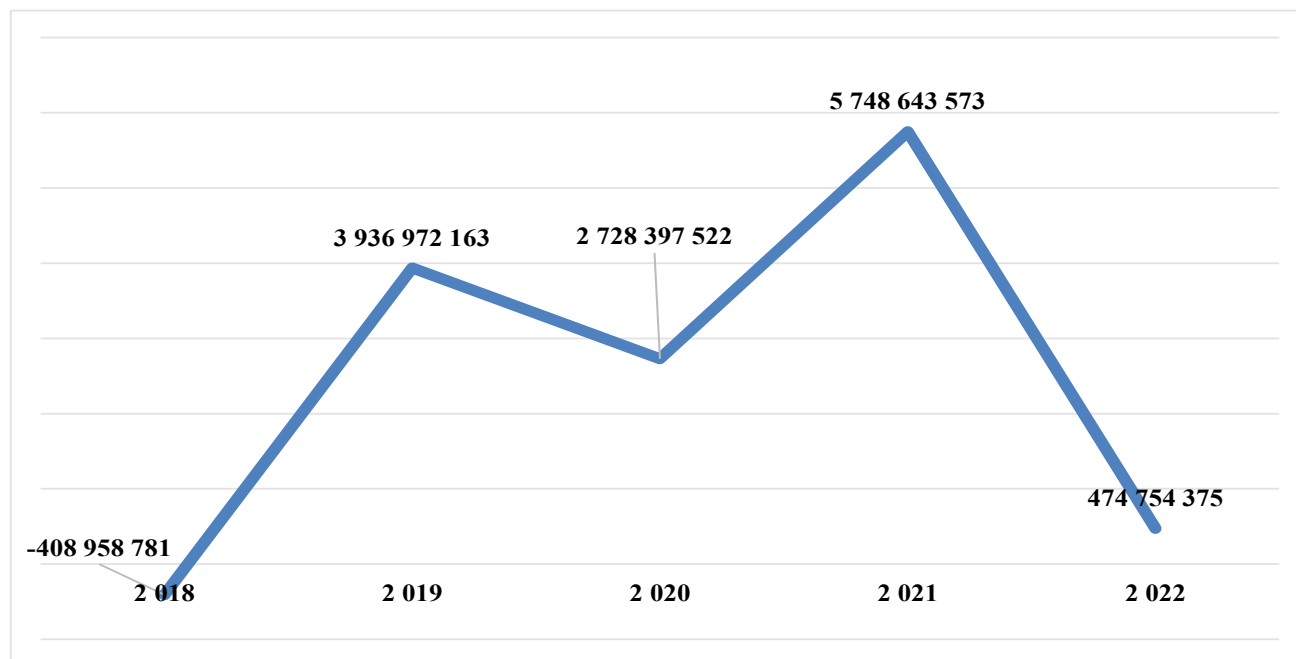
Source : CDS/BDS-CAMWATER

Graph 17: Evolution of overall Turnover (in CFA Francs)



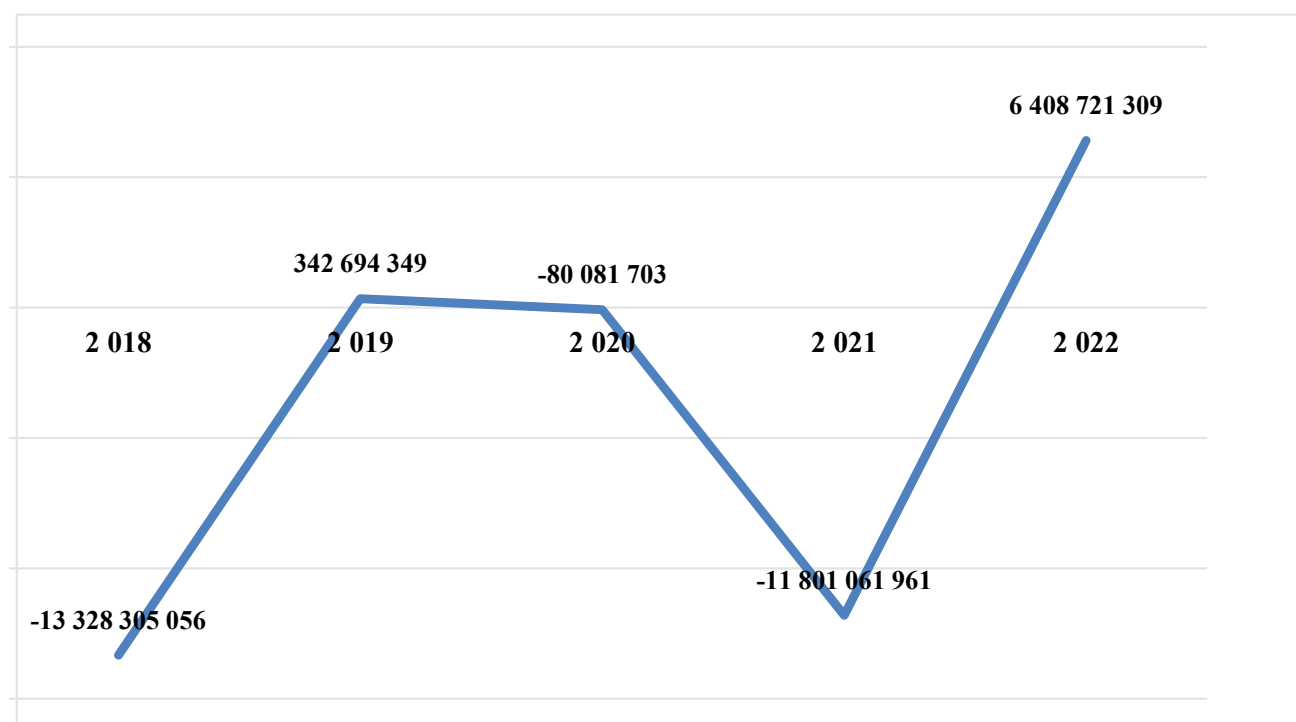
Source : CDS/BDS-CAMWATER

Graph 18: Evolution of Gross Operating Surplus (in CFA francs)



Source : CDS/BDS-CAMWATER

Graph 19: Evolution of Operating Income (in CFA francs)



Source : CDS/BDS-CAMWATER

Table 23: Evolution of financial variables (in CFA francs)

YEAR	OVERALL TURNOVER	GROSS OPERATING SURPLUS	OPERATING INCOME
2 018	28 286 245 732	-408 958 781	-13 328 305 056
2 019	39 253 478 064	3 936 972 163	342 694 349
2 020	39 884 334 582	2 728 397 522	-80 081 703
2 021	36 724 464 437	5 748 643 573	-11 801 061 961
2 022	39 308 861 159	474 754 375	6 408 721 309

Source : CDS/BDS-CAMWATER, NB: The 2022 financial data are provisional

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