

WATER AND SANITATION STATISTICS AS OF DECEMBER OF THE YEAR 2019

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PART I. WATER

1. Urban water supply

1.1. Urban water subscribers

As of December 2019, the number of urban and peri-urban water subscribers served by WASAC Ltd increased to 222,566 from 219,127 connections recorded at the end of September 2019, which represents an increase of 1.6 percent. The 51% of these connections are in the City of Kigali while 49% of them are distributed in the provinces. This difference is mainly attributed to the fact that, the people and institutions in the provinces are supplied by Rural Water Service Providers.

Table 1: Urban water subscribers per province and City of Kigali as of December 2019

Province	Sep-2019	Dec-2019	Variation (%)
City of Kigali	113,122	114,678	1.4
Southern province	28,277	28,705	1.5
Western province	21,425	21,657	1.1
Northern province	18,530	19,011	2.6
Eastern province	37,773	38,515	2.0
Total	219,127	222,566	1.6

Source: WASAC, December 2019

Table 2: WASAC customers per category of subscribers of December 2019

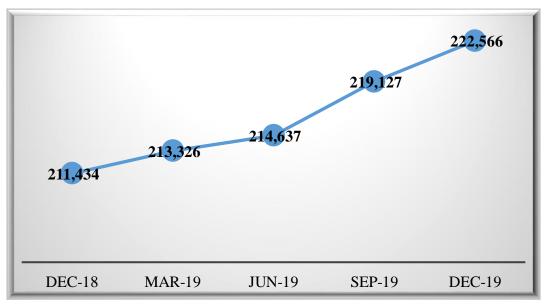
At the end of December 2019, the 91.21% of urban water subscribers are in the category of residential, whereas the remaining 8.79% are in the category of non-residential, industrial, and public standpipes.

Category of subscribers	Water subscribers	Share (%)
Residential connections	202,994	91.21
Non-Residential connections	14,720	6.61
Industrial connections	232	0.10
Public Standpipes (BF)	4,620	2.08
Total subscribers	222,566	100.0

Source: WASAC, December 2019

Figure 1: Trend of WASAC customers from December 2018 to December 2019

At the end of December 2019, the number of connected customers increased to 222,566 from 211,434 recorded at the end of December of the year 2018, representing an increase of 5.3%.



Source: WASAC, December 2019

1.2. Urban water tariff

Table 3: Applicable tariff for WASAC customers by consumption block (VAT exclusive)

Customer category	Monthly con- sumption block	Tariff up to Jan 2019 (Frw/m3)	Current tariff (Frw/m3)	Variation (%)
Public taps	N/A	323	323	0.0
Residential	0-5m3	323	340	5.3
	6-20m3	331	720	117.5
	21-50m3	413	845	104.6
	> 50 m3	736	877	19.2
Non Residential	0-50m3	736	877	19.2
	> 50 m3	847	895	5.7
Industries	N/A	736	736	0.0

Source: RURA

1.3. Water produced, supplied and billed

1.3.1. Water production

During this quarter under review, the total quantity of water produced by WASAC Ltd for suppling in its service area stood at 13.0 million cubic meters. The below figure displays the quantity of water producted in the fourth quarter of year 2019 per water treatment plant.

NZOVE 4,572,461 KIMISAGARA 2,130,147 KARENGE 1,391,647 **GIHIRA** 688,903 NYAGATARE 646,689 MUTOBO 638,500 MUHAZI 476,179 KADAHOKWA 479,405 **CYUNYU** 369,639 MPANGA 309,383 NGENDA 296,367 287,155 **GIHUMA** 159,106 RWASABURO 139,538 NYAMABUYE 128,711 SHYOGWE -MAYAGA 125,620 GISUMA 114.082 KANYABUSAGE 59.291 KANYONYOMBA

Figure 2: Water production (m³) per treatment plant as of the 4th quarter 2019

Source: WASAC, December 2019

1.3.2. Water supplied into the network

During this quarter under review, the quantity of water supplied into the network was 12.4 million cubic meters whereas 7.0 million cubic meters were billed. The difference of 553,111 cubic meter between water produced (13,012,823 m³) and supplied (12,459,712 m³) is an estimated water loss mainly from back washing and network flushing.

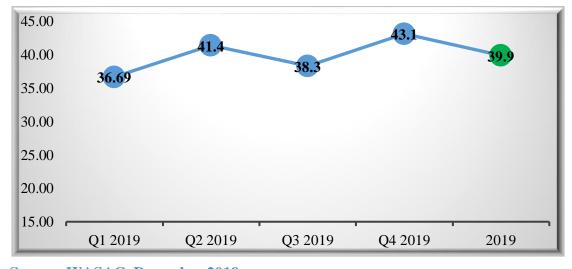
Table 4: Water supplied, billed and loss as of December 2019

District	Water supplied (m ³)	Water billed (m ³)	Water loss (m ³)	Water loss (%)
Kigali City	7,574,912	4,488,433	3,086,479	40.7
Bugesera	290,503	224,020	66,483	22.9
Gicumbi	139,398	77,362	62,036	44.5
Huye	459,661	252,679	206,982	45.0
Karongi	114,037	66,879	47,158	41.4
Muhanga	277,389	170,077	107,312	38.7
Musanze	648,814	395,823	252,991	39.0
Ngoma	157,398	85,597	71,801	45.6
Nyagatare	633,813	228,861	404,952	63.9
Nyamagabe	124,337	86,855	37,482	30.1
Nyanza	216,746	121,053	95,693	44.1
Rubavu	673,414	384,274	289,140	42.9
Ruhango	104,134	55,098	49,036	47.1
Rusizi	369,557	158,139	211,418	57.2
Rwamagana	675,599	290,051	385,548	57.1
Total	12,459,712	7,085,201	5,374,511	43.1

Source: WASAC, December 2019

Figure 3: Trend of non-revenue water (%) from 1st quarter to 4th quarter 2019

The chart below illustrates that 39.9 percent of water supplied within all branches in 2019 was non-revenue water due mainly to illegal connections, leakages, road construction, metering inaccuracies, meter bursts, meter blocked, and stealing water by moving meters.



Source: WASAC, December 2019

1.4. Rural water tariff

Table 5: Application rural water tariffs per water system (VAT exclusive)

Water system	Tariff RWF/m ³	Tariff RWF/Jerrican
Gravity	287	7
Electricity pumping	731	17
Diesel Pumping	921	21
Turbo	689	16
Complex System	597	14

Source: Board Decision N°06/BD/ER-LER/RURA/2016

Table 6: Licensed water service providers as of December 2019

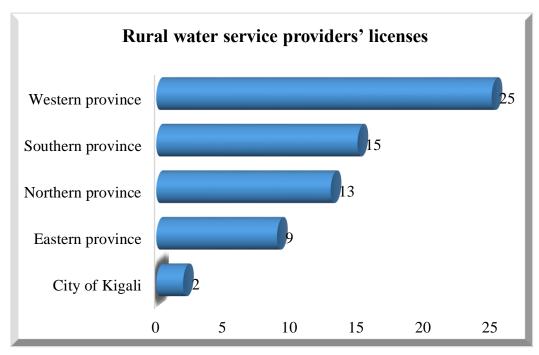
As of December 2019, one (1) Urban Water Supply, one (1) for Bulk Water Supply, one (1) for Management of Complex Rural Water Supply Infrastructure, and sixty-three (63) for Rural Water Supply Infrastructure Management licenses were issued.

Category of license	Number of licensees
Urban Water Supply (Water Utility- WU)	1
Bulk Water Supply License (BWS)	1
Rural Water Supply (Management of Complex Water Supply Infrastruc-	1
ture-(MCWSI)	
Rural Water Supply (Water Supply Infrastructure Management-WSIM)	63

Source: RURA, December 2019

Figure 4: Distribution of rural water service providers' licenses as of December 2019

At the end of December 2019, twenty-five (25) licenses were provided to rural water service operators for serving in Western province, fifteen (15) in Southern province, thirteen (13) in Northern province, nine (9) in Eastern province and two (2) licensees in the City of Kigali.



Source: RURA, December 2019

PART II: SANITATION

At the end of December 2019, two hundred and thirteen (213) cleaning services, seven (7) liquid waste water treatment system, six (6) solid waste collection and transportation, five (5) waste recycling, one (1) treatment of hazardous waste management, and thirty-two (32) solid waste collection and transportation licenses were issued in the need to increase the hygiene and cleaning services in Rwanda.

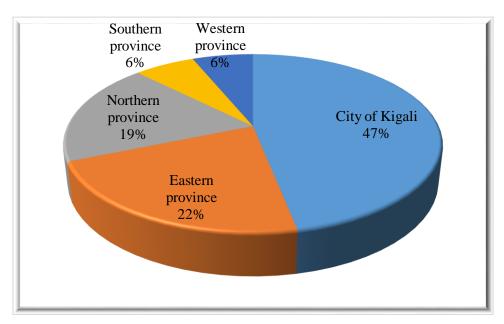
Table 7: Licensed sanitation operators as of December 2019

Category of license	Number of licensees
Cleaning services	213
Liquid wastewater treatment system	7
Liquid waste collection and transportation	6
Waste recycling	5
Treatment of hazardous waste management	1
Solid waste collection and transportation.	32

Source: RURA, December 2019

Figure 5: Distribution of solid waste collection and transportation operators across provinces and the City of Kigali as of December 2019

The 47 percent of recorded licenses for the collection and transportation of sold wastes were in City of Kigali whereas 53 percent were in the provinces.



Source: RURA, December 2019

Table 8: Maximum tariff for solid waste collection and transportation in the City of Kigali

District	Sector	Tariff (Frw) per month for two sacks in a week for househo		
		Lower income earners	Middle income	Higher income
			earners	earners
Nyarugenge	Mageragere	2,300	4,600	6,900
	Kanyinya	2,000	4,100	6,100
	Nyamirambo	2,000	3,900	5,900
	Kigali	2,100	4,100	6,200
	Kitega	1,900	3,800	5,700
	Rwezamenyo	1,800	3,600	5,500
	Nyakabanda	1,900	3,800	5,600
	Muhima	1,800	3,700	5,500
	Nyarugenge	1,800	3,600	5,300
	Kimisagara	1,900	3,700	5,600
Kicukiro	Gahanga	1,800	7,500	11,200
	Gatenga	1,200	5,100	7,700

District	ict Sector Tariff (Frw) per month for two sacks in a week for ho			week for household
		Lower income earners	Middle income	Higher income
			earners	earners
	Gikondo	1,000	4,000	6,000
	Kagarama	1,800	3,700	5,500
	Kanombe	1,900	3,900	5,800
	Kicukiro	1,900	3,900	5,800
	Kigarama	1,900	3,700	5,600
	Masaka	2,100	4,300	6,400
	Niboye	1,800	3,600	5,400
	Nyarugunga	2,200	4,300	6,500
Gasabo	Bumbogo	2,200	4,400	6,500
	Gikomero	2,000	3,900	5,900
	Rusororo	1,900	3,800	5,700
	Jabana	1,700	3,300	5,000
	Ndera	1,800	3,700	5,500
	Kinyinya	1,800	3,500	5,300
	Kimihurura	1,700	3,400	5,200
	Remera	1,700	3,400	5,200
	Rutunga	2,000	3,900	5,900
	Jali	1,900	3,900	5,800
	Nduba	1,700	3,300	5,000
	Kimironko	1,700	3,300	5,000
	Kacyiru	1,700	3,300	5,000
	Gisozi	1,700	3,500	5,200
	Gatsata	1,700	3,400	5,100

Source: Board Decision No 008/WASAN-RURA/2012