

ANNEX 2
DETAILS OF MURANG'A WATER AND SEWERAGE COMPANY
(MUWASCO)
REGULAR TARIFF APPLICATION (2019/20 to 2023/24)

1. Cost and Revenue Structure for the Tariff Period

	Ksh.	Ksh.
Cost Subject to Annual Indexation		
Operations and Maintenance costs	182,197,628	182,197,628
Fixed Costs		
Average Annual Investment Cost	31,593,833	
Debt	51,371,293	
Average Annual Asset Renewal	16,536,500	
Sub Total- Fixed Costs		99,501,626
Total Average Annual Cost		281,699,254
Projected Average Annual revenue		306,096,135
Average Annual Cost Coverage		109%

2. Proposed Change in Water Tariff Structure for 2019/20 to 2023/24

Customer Category	Current		Proposed	
	Consumption Block in m ³	Tariff	Consumption Block in m ³	Tariff
Domestic	0-6	55	0-6.	55
	7-20	70	7-20.	75
	21-50	90	21-50	90
	51-100	100	51-100	110
	101-300	110	101-300	115
	>300	135	>300	135
Commercial/industrial				
	0-6	55		
	7-20.	70		
	21-50	90	1-50	90
	51-100	100	51-100	110
	101-300	110	101-300	115
	>300	135	>300	135
Government				
	0-6	70		
	7-20	90		
	21-50	100	1-50	90
	51-100	100	51-100	110
	101-300	110	101-300	115
	>300	135	>300	135
Public schools, Universities & colleges				
	0-600	70	0-600	70.00
	601 - 1200.	90	601 - 1200.	100.00
	>1200	100	>1200	120.00
Water Kiosk (Per M3)		35		35

3. Proposed Change in Sewerage Tariff Structure for 2019/20 to 2023/24
3a) Consumers with a Water Connection

Customer Category	Current	Proposed	
		Consumption Block in m ³ (75 % of water consumed)	Tariff Per M ³
Domestic	75 % of water consumed at the price of water	0-6.	36
		7-20.	40
		21-50	42
		51-100	45
		101-300	48
		>300	50
Commercial/industrial			
		1-50	42
		51-100	45
		101-300	48
		>300	50
Government			
		1-50	42
		51-100	45
		101-300	48
		>300	50
Public schools, Universities & colleges			
	0-600	40.00	
	601 - 1200.	48.00	
	>1200	50.00	

3b) Consumers without a Water Connection

Sewerage consumers without a water connection shall be charged as follows:

- Domestic: Ksh. 350 Per Month
- All other categories: 75% of the volume of water consumed at the rates specified in 3(a) above

4. Indexation of the Proposed Tariff

- i. The utility shall be eligible for annual indexation of the approved tariff, as per the regulations of the Water Services Regulatory Board (WASREB).
- ii. The inflation adjustment shall come into effect every **July** of the tariff period commencing 1st **July 2022**.

5. Miscellaneous Charges

These shall be charged as per the approved miscellaneous charges approved by WASREB.

6. Service Delivery Conditions attached to the Tariff

Target	2019/20	2020/21	2021/22	2022/23	2023/24
Water Coverage	92%	93%	94%	95%	96%
Water quality standards	100%	100% compliance with the quality standards			
Non- Revenue Water	24%	23%	22%	21%	20%
Hours of Supply (Hrs)	24	24	24	24	24
Personnel Expenditure as % of O&M Costs	52%	50%	48%	46%	45%
Staff per 1000 connections	5	4	4	4	4
Metering ratio	100%	100%	100%	100%	100%
Collection Efficiency	>95	>95	>95	>95	>95
Resale at Kiosk	Regulate resale by kiosk vendors at Ksh. 2 per 20-litres. Tariffs at kiosks must be displayed at strategic points for public awareness				

1. Other Conditions

- i. **Annual budgets:** The WSP shall adhere to the budgetary levels set in the tariff.
- ii. **Surpluses:** the surpluses projected to be realised shall ONLY be used on the rehabilitation/ Replacement of dilapidated water networks, in order to curb physical losses of water. MUWASCO shall in the first year of tariff implementation identify priority networks to be rehabilitated and communicate the same to WASREB in writing.
- iii. **Reporting:** The utility shall submit to WASREB a quarterly performance report in the format provided.
- iii. **Investments:** The utility shall undertake the following investments:

2019-2020 INVESTMENT PROJECTS						
	PROJECT AREA	SIZE	DESCRIPTION	UNIT	QUANTITY	PROJECT COST
1	Meters		Procurement of Consumer meters	no	3,000	9,600,000
3	Buildings		Kabuta tank repair and fence kongu-ini tank	no	2	300,000
4	Office equipment		Computers and printers	no	10	2,425,167
						12,325,167
	Extension of Distribution/service					
5	Gitungano	DN 63	Extension of water supply to increase water coverage	m	1,800	1,400,000
6	Marewa Wandaka	DN 63	Extension of water supply to increase water coverage	m	1,500	1,350,000
7	Gikuu villge	DN 63	Extension of water supply to increase water coverage	m	3,000	1,550,000
8	Gikuu gatamayu	DN 63	Extension of water supply to increase water coverage	m	2,000	1,200,000
9	Marewa kwa mucemi ridge	DN 63	Extension of water supply to increase water coverage	m	2,000	1,200,000
10	Nyakiga	DN 63	Extension of water supply to increase water coverage	m	700	930,500
6	Gikuu 5 junction	DN 63	Extension of water supply to increase water coverage	m	2,500	1,050,000
11	Kiawambeu distribution	DN 63	Extension of water supply to increase water coverage	m	5,000	2,300,000
						10,980,500
	Sewerage Rehabilitation and					
16	Njoguini	DN90	Rehabilitation of old distribution system to improve reliability	m	5,000	1,750,000
						1,750,000
			Total Minor investments			25,055,667
	Major projects					
19	Karichiungu kiharu Raw water project	DN	Intake and Raw water Mains to Kiharu T/works	m	10,500	47,216,927
						47,216,927
	Total					72,272,594

2020-2021 INVESTMENT PROJECT						
	PROJECT AREA	SIZE	DESCRIPTION	UNIT	QUANTITY	PROJECT COST
1	Meters		Procurement of meters	no	3,000	10,500,000
2	Vehicles and motorbikes		2 motorbikes	no	1 & 2	450,000
3	Buildings		Stores Extension	no	1	2,000,000
4	Office equipment		Computers and printers	no	10	4,000,000
						16,950,000
	Extension of service line					
1	Gikuu gwa kiroko	DN 63	Extension of water supply to increase water coverage	m	1,500	68,500
2	Gikandu distribution	DN 63	Extension of water supply to increase water coverage	m	7,500	1,875,000
3	Embassy	DN 63	Extension of water supply to increase water coverage	m	2,500	1,050,000
						2,993,500
1	Sewerage Rehabilitation and extension lines	Various	Various sewer service line extensions			6,000,000
			Total Minor investments			25,943,500
	Major Projects					
1	Murang'a mukuyu	DN	Sewer improvement project	m	10,000	151,397,999
2	Kayahwe kiawambeu Raw water project	DN 200	Additional raw water supply to increase production	m	10,500	75,639,635
						227,037,634
			Total			252,981,134

2021-2022 INVESTMENT PROJECTS						
	PROJECT AREA	SIZE	DESCRIPTION	UNIT	QUANTITY	PROJECT COST Ksh
1	Meters		Procurement of meters	no	3,000	10,500,000
2	Vehicles and motorbikes		Procurement of 1 vehicle & 4 motorbikes	no	1&4	6,000,000
3	Buildings		Fixtures and fittings	no	2	1,000,000
4	Office equipment		Computers and printers	no	15	2,000,000
						19,500,000
Extension of service line						
1	slaughter estate distribution	DN 63	Extension of water supply to increase water coverage	m	13,000	3,250,000
2	Kairo ridge	DN 63	Extension of water supply to increase water coverage	m	500	820,000
3	Marewa shopping centre	DN 63	Extension of water supply to increase water coverage	m	600	850,000
4	Kayuyu primary ridge	DN 63	Extension of water supply to increase water coverage	m	400	620,000
5	Kabuta behind nokras riverline	DN 63	Extension of water supply to increase water coverage	m	600	600,000
6	Githuri after railway	DN 63	Extension of water supply to increase water coverage	m	650	650,000
7	Kimathi -ndiaboru	DN 63	Extension of water supply to increase water coverage	m	2,500	2,500,000
8	Kahatia-mute	DN 63	Extension of water supply to increase water coverage	m	500	500,000
9	Kiawambeu-mbogo-ini	DN 63	Extension of water supply to increase water coverage	m	300	300,000
						10,090,000
Water system rehabilitation						
1	Mumbi	DN63	Rehabilitation of old distribution system to improve reliability	m	6,000	2,310,000
2	Mukuyu market	DN160	Rehabilitation of old distribution system to improve reliability	m	1,200	2,400,000
3	Mukuyu -giathi kia mburi line	DN90	Rehabilitation of old distribution system to improve reliability	m	3,500	3,500,000
						8,210,000
1	Sewerage Rehabilitation and extension lines	Various	Various sewer service line extensions			6,000,000
Total						43,800,000

2022-2023 WATER AND SEWER PROJECTS						
	PROJECT AREA	SIZE	DESCRIPTION	UNIT	QUANTITY	PROJECT COST
1	Meters		Procurement of meters	no	3,000	10,500,000
2	Vehicles and motorbikes		Procurement of 1 Exhauster lorry & 4 motorbikes	no	1&4	14,000,000
3	Buildings		Fixtures and fittings	no	2	1,000,000
4	Office equipment		Computers and printers	no	15	2,000,000
						27,500,000
	Extension of service line					
1	Kiangatia	DN 63	Extension of water supply to increase water coverage	m	1,000	1,500,000
2	Airstrip	DN 63	Extension of water supply to increase water coverage	m	1,500	1,800,000
3	Gwathamaki	DN 63	Extension of water supply to increase water coverage	m	2,000	2,200,000
4	Karemaini	DN 63	Extension of water supply to increase water coverage	m	800	820,000
5	Githuuri center	DN 63	Extension of water supply to increase water coverage	m	650	650,000
6	Sagana road	DN 63	Extension of water supply to increase water coverage	m	2,500	2,500,000
						9,470,000
	Water system rehabilitation					
1	Raw water main	DN350	Rehabilitation of old distribution system to improve reliability	m	2,000	2,000,000
2	Transmission main	DN160	Rehabilitation of old distribution system to improve reliability	m	1,500	1,250,000
3	Maragi-kiharu	DN160	Rehabilitation of old distribution system to improve reliability	m	3,000	1,290,500
4	Embassy	DN50	Rehabilitation of old distribution system to improve reliability	m	1,500	682,000
5	Njoquini	DN90	Rehabilitation of old distribution system to improve reliability	m	5,000	1,750,000
6	karuri	DN110	Rehabilitation of old distribution system to improve reliability	m	7,000	2,450,000
7	Mukuyu market	DN160	Rehabilitation of old distribution system to improve reliability	m	2,000	3,000,000
			Total			71,192,500

2023-2024 INVESTMENT PROJECTS						
	PROJECT AREA	SIZE	DESCRIPTION	UNIT	QUANTITY	PROJECT COST
1	Meters		Procurement of meters	no	3,000	12,000,000
2	Vehicles and motorbikes		Procurement of 1 Bowser, 1 vehicle & 6 motorbikes	no	1&6	22,000,000
3	Buildings		Fixtures and fittings	no	Several	3,000,000
4	Office and NRW equipment		Computers and printers	no	15	4,000,000
						41,000,000
Extension of service line						
1	Embassy	DN 63	Extension of water supply to increase water	m	800	1,020,000
2	Gikandu	DN 63	Extension of water supply to increase water	m	600	850,000
3	Upendo	DN 63	Extension of water supply to increase water	m	700	890,000
4	Kabuta opp. nokras riverline	DN 63	Extension of water supply to increase water	m	600	600,000
5	Gikandu	DN 63	Extension of water supply to increase water	m	650	650,000
6	Maragwa A&B	DN 63	Extension of water supply to increase water	m	2,300	2,200,000
7	Katiba	DN 63	Extension of water supply to increase water	m	500	500,000
						6,710,000
Water system rehabilitation						
1	Mukuyu market	DN160	Rehabilitation of old distribution system to improve	m	1,500	3,000,000
2	CBD	DN90	Rehabilitation of old distribution system to improve	m	2,500	3,500,000
						6,500,000
1	Sewerage Rehabilitation and extension lines	Various	Various sewer service line extensions			20,000,000
Total Minor investments						74,210,000