

#### DETAILS OF NYERI WATER AND SEWERAGE COMPANY (NYEWASCO) REGULAR TARIFF APPLICATION (2020/21 to 2024/25)

### 1. Cost and Revenue Structure for the Tariff Period

	KSh.	KSh.
Cost Subject to Annual Indexation		
Operations and Maintenance costs		431,566,579
Fixed Costs		
Average Annual Investment Cost & Asset Renewal	32,551,490	
Average Annual Debt Repayment (Principal)	83,061,862	
Sub Total- Fixed Costs		115,613,351
		-
Total Average Annual Cost		547,179,930
Projected Average Annual revenue		629,056,983
Average Annual Cost Coverage		115%

#### 2. Proposed Change in Water Tariff Structure for 2020/21 to 2024/25

Customer Category	Current		Proposed	
Domestic	Consumption Block in M <sup>3</sup>	Tariff	Consumption Block in M <sup>3</sup>	Tariff (KSh/M³)
	0-10	31.84	1-6	47
	11 – 20	44.30	7-20.	75
	21-40	50.05	21-50	80
	41-100	63.29	51-100	85
	Over 100	63.61	101-300	90
			>300	100
Commercial/industrial				
	0-10	47.77	1-50	75
	11 – 20	60.46	51-100	85
	21-40	69.99	101-300	90
	41-100	79.61	>300	100
	Over 100	95.53		
Government				
	0-10	31.84	1-50	75
	11 – 20	44.30	51-100	85
	21-40	50.05	101-300	90
	41-100	63.29	>300	100
	Over 100	63.61		
Public schools, Universities	s & colleges			
	0-600	31.84	1-600	40.00
	601-1200	31.84	601 - 1200.	50.00
	>1200	31.84	>1200	55.00
Water Kiosk (Per M3)		15		25.00



3. Proposed Change in Sewerage Tariff Structure for 2020/21 to 2024/25

3a) Sewerage Consumers with a Water Connection

Customer Category	Current		Proposed	
Domestic			Consumption Block in M <sup>3</sup>	Tariff (Ksh/M3)
	75 % of water consumed at the Tariff of water	75 % of water consumed	0-6.	45
			7-20.	52
			21-50	60
			51-100	75
			101-300	80
			>300	87
Commercial/industrial				
			1-50	52
			51-100	75
			101-300	80
			>300	87
Government	_			
			1-50	52
	100% of water consumed	100% of water	51-100	75
	at the Tariff of water	consumed	101-300	80
	_		>300	87
	$\exists$			
Public schools, Universities & colleges				
			0-600	35.00
			601 - 1200.	45.00
			>1200	50.00

#### 3b) Consumers without a Water Connection

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

- Single dwelling Domestic unit: Ksh. 350 Per Month
- All other categories: Volume of water consumed as per the metered source 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 1<sup>st</sup> **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	2024/25					
Water Coverage	94%	95%	96%	97%	98%	98%					
Sewerage Coverage	28%	30%	32%	34%	36%	40%					
Water quality standards		100%									
Non- Revenue Water	15%	13%	13%	12%	12%	12%					
Hours of Supply (Hrs)	24	24	24	24	24	24					
Maintenance/O&M	≥13%	≥13%	≥13%	≥13%	≥13%	≥13%					
Personnel Expenditure as % of O&M Costs	39%	36%	34%	32%	30%	30%					
Staff per 1000 connections	5	5	5	5	4	4					
Metering ratio	100%	100%	100%	100%	100%	100%					
Collection Efficiency	>95%	>95%	>95%	>95%	>95%	>95%					
Resale at Kiosk	Regulate resale	Regulate resale by kiosk vendors at Ksh. 2 per 20-litres. Tariffs at kiosks must be displayed at strategic points for public awareness									

#### 7. Other Conditions

- i. Annual budgets: The WSP shall adhere to the budgetary levels set in the tariff.
- ii. **Surplus**: The surpluse projected to be realised shall be used on priority infrastructure projects identified by NYEWASCO and Approved by WASREB.
- 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:



## 1. Water and Sewerage Infrastructure Projects

			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
1.	Upgrading Kihuyo-Mweiga	Water						
			13,205,280					
2.	Upgrading of Zone 20 -Ngangarithi	Water						
	Distribution						4,702,448	
3.	network.							
4.	Baraka Chaka Water extension project	Sewerage						
	-	-			75,590,624			
5.	Electolysis and Automation of chlorine	Water						
	dosing at Kamakwa water treatment		3,000,000					
TOTAL								
			16,205,280	-	75,590,624	-	4,702,448	-

## 2. Laboratory Equipment

No	EQUIPMENT	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
1	Benchtop ph meter	800,000					
2	Benchtop Conductivity meter	800,000					
3	Flame spectrophotometer	900,000					
4	Oil & Grease unit	350,000					
5	Digital Titrator	200,000					
							350,000.00
6	Automatic wastewater sampler		700,000				
							700,000.00
7	Laboratory incubator		900,000				
8	Laboratory Autoclave		900,000				
9	Water Distiller		500,000				
10	Benchtop Spectrophotometer			1,800,000			



11	Water deionizer			450,000			
12	Membrane filtration unit			900,000			
13	Turbidity meter				900,000		
14	Electronic weighing balance				800,000		
15	Chromatography				1,500,000		
16	Laboratory oven					900,000	
17	Laboratory vibrator					300,000	
18	Oxitop and box					1,800,000	
	Sub Totals	3,050,000	3,000,000	3,150,000	3,200,000	3,000,000	1,050,000
19	Maitenance/servicing & Annual calibration	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
	TOTAL	4,050,000	4,000,000	4,150,000	4,200,000	4,000,000	2,050,000

# 3. Non- Revenue Water Equipment

ITEM		QUANTITY	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
1.	INSERTION FLOW METER	2	2,000,000	-	-	-	-	-
2.	UPGRADES		10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
3.	PRESSURE LOGGERS	2	200,000	-	-	-	-	-
4.	PRESSURE REDUCING VALVES	20(yearly)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
5.	ULTRASONIC FLOW METER	2	-		-	-	-	-
				1,500,000.00				
6.	AUTOMATION OF PRODUCTION METERS	2	-	-	2,000,000	2,000,000		
7.	PIPE LOCATOR	2	300,000	-	-	-	-	-
8.	EQUIPMENT MAINTENANCE &		500,000	500,000	500,000	500,000	500,000	500,000
	CALIBRATION							
TOTAL			14,000,000	13,000,000	13,500,000	13,500,000	11,500,000	11,500,000



## 4. Meters

2019_2020				2020_2021		
Size	Quantity	Price (Ksh)	Amount	Quantity	Price (Ksh)	Amount
Copolymer meters						
15 mm	1,200	2,950	3,540,000	1,350	3,200	4,320,000
20 mm	200	3,500	700,000	200	3,700	740,000
25 mm	200	8,700	1,740,000	200	9,100	1,820,000
<u>40 mm</u>	20	21,000	420,000	20	22,000	440,000
	1,620		6,400,000	1,770		7,320,000
Zonal Meters (Brass Meters)						
50 mm	20	14,500	290,000	25	1,600	40,000
80 mm	20	16,500	330,000	25	18,200	455,000
100 mm	20	22,500	450,000	20	25,000	500,000
300 mm	4	107,000	428,000	5	120,000	600,000
350 mm	4	120,000	480,000	5	133,000	665,000
400 mm	4	245,000	980,000	5	270,000	1,350,000
450 mm	4	300,000	1,200,000	5	330,000	1,650,000
500 mm	3	425,000	1,275,000	4	470,000	1,880,000
8 inch	5	50,000	250,000	5	55,000	275,000
<u>10 inch</u>	4	85,000	340,000	4	95,000	380,000
	88		6,023,000	103		7,795,000
TOTALS	1,708		12,423,000	1,873		15,115,000

	2021_2022			2022_2023			2023_2024			2024_2025		
Size	Quantity	Price (Ksh)	Amount									
Copolymer meters												
15 mm												
	1,350	3,200	4,320,000	1,350	3,200	4,320,000	1,350	3,200	4,320,000	1,350	3,200	4,320,000
20 mm												
	200	3,700	740,000	200	3,700	740,000	200	3,700	740,000	200	3,700	740,000



						-						
25 mm	200	9,100	1,820,000	200	9,100	1,820,000	200	9,100	1,820,000	200	9,100	1,820,000
<u>40 mm</u>	20	22,000	440,000	20	22,000	440,000	<u>20</u>	22,000	440,000	<u>20</u>	22,000	440,000
	1,770		7,320,000	1,770		7,320,000	<u>1,770</u>		7,320,000	1,770		7,320,000
Zonal Meters (Brass Meters)												
50 mm	25	1,600	40,000	25	1,600	40,000	25	1,600	40,000	25	1,600	40,000
80 mm	25	18,200	455,000	25	18,200	455,000	25	18,200	455,000	25	18,200	455,000
100 mm	20	25,000	500,000	20	25,000	500,000	20	25,000	500,000	20	25,000	500,000
300 mm	5	120,000	600,000	5	120,000	600,000	5	120,000	600,000	5	120,000	600,000
350 mm	5	133,000	665,000	5	133,000	665,000	5	133,000	665,000	5	133,000	665,000
400 mm	5	270,000	1,350,000	5	270,000	1,350,000	5	270,000	1,350,000	5	270,000	1,350,000
450 mm	5	330,000	1,650,000	5	330,000	1,650,000	5	330,000	1,650,000	5	330,000	1,650,000
500 mm	4	470,000	1,880,000	4	470,000	1,880,000	4	470,000	1,880,000	4	470,000	1,880,000
8 inch	5	55,000	275,000	5	55,000	275,000	5	55,000	275,000	5	55,000	275,000
<u>10 inch</u>	4	95,000	380,000	4	95,000	380,000	4	95,000	380,000	4	95,000	380,000
	<u>103</u>		<u>7,795,000</u>									
<u>TOTALS</u>	<u>1,873</u>	<u>:</u>	<u>15,115,000</u>	<u>1,873</u>	<u>-</u>	<u>15,115,000</u>	<u>1,873</u>	<u>-</u>	<u>15,115,000</u>	<u>1,873</u>	<u>-</u>	<u>15,115,000</u>



## 5. Motor Vehicles, Motor Cycles and other movable equipment

	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Vehicle & Plants					,
Pick up	3,000,000				
Canter	5,000,000				
Corporate minibus		5,000,000			
Excavator			8,000,000		
1no double cab					7,900,000
Motor Bike (150cc @150,000)	450,000	450,000	750,000	450,000	450,000
Totals					
	8,450,000	5,450,000	8,750,000	450,000	8,350,000

## 6. ICT Equipment and Software

Hardware and software requirements	Unit	2019/20	2020/21	2021/22	2022/23	2023/24
Computer Server, Software, Installation and Commissioning	2		1,000,000			
Desktop computers/laptops (10 per year)	10	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Printers	5	100,000	600,000		50,000	
Power backup system	3		1,500,000			
Microsoft Office upgrade	50	1,000,000				
Sage evolution maintenance and upgrade	1	500,000	500,000	500,000	500,000	500,000
Sage People maintenance and upgrade	1	300,000	300,000	300,000	300,000	300,000
Seqrite antivirus renewal	100	100,000	100,000	100,000	100,000	100,000
Sematime maintenance and upgrade	1	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
GIS upgrade and integration	1			2,500,000	2,500,000	2,500,000
Sophos Firewall licence renewal	1	300,000			300,000	
Online data backup license renewal	1	395,000	395,000	395,000	395,000	395,000
New Billing Systems Integration & New mobile applications	N/A		500,000	500,000	500,000	500,000
	Total		6,195,000	8,395,000	7,795,000	8,145,000