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# **WATER UTILITIES PERFORMANCE REVIEW REPORT FOR FY 2018/19**

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**REGIONAL AND NATIONAL PROJECT WATER UTILITIES**

**March 2020**

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## CHAIRMAN'S STATEMENT

On behalf of the Board of Directors of the Energy and Water Utilities Regulatory Authority (EWURA), I have the pleasure to present the 11<sup>th</sup> Water Utilities Performance Review Report for Regional and National Project Water Supply and Sanitation Authorities (RNP WSSAs) for the FY 2018/19. This Report is the 11<sup>th</sup> in a period of 13 years of EWURA operations and it has been prepared and submitted as per the requirements of governing laws and sector policy.

This report identifies areas potential for investment through availability of reliable water supply and sanitation services hence contributes towards industrialization agenda. The report also, presents the gaps in terms of water supply and sanitation services within RNP WSSAs service area in order to call for stakeholders involvement and participation in bridging the gap. Further, the report is an important tool for evaluating progress towards achieving the Sustainable Development Goals (SDGs)- goal number 6 on sustainable water and sanitation for all; National Development Vision 2025 target on high quality livelihood through universal access to safe water services ; and National Five Year Development Plan (FYDP), 2016/17 - 2020/21.

Although already there are institutional reforms in the water sector from July 2019, this report provides a detailed analysis of performance of RNP WSSAs during FY 2018/19 which ended in June 2019. The findings outlined in this report are key reference for RNP WSSAs Boards of Directors and Management and other stakeholders to improve water supply and sanitation services in RNP WSSAs service areas. Furthermore, the report helps to get accurate data and information on the status of provision of water supply and sanitation services for proper planning and will be useful in guiding stakeholders in effective allocation of resources for achievement of the national and international targets.

Preparation of this report has been possible through contributions and opinions gathered from various stakeholders in the course thereof. My sincere appreciation goes to Hon. Professor Makame M. Mbarawa (MP) the Minister for Water and Professor Kitila Mkumbo the Permanent Secretary of the Ministry of Water and other stakeholders for creating a conducive environment, which enabled EWURA to conduct its functions effectively and efficiently during FY 2018/19, in particular the regulation of performance of RNP WSSAs. I also thank the Boards of Directors and the Management teams of all RNP WSSAs for their commendable cooperation that has made the preparation of this report possible.

Finally, I take this opportunity to congratulate my colleagues, the EWURA Board members, Management and Staff for their undivided commitment, dedication and hard work during the year under review.



Ahmad Kilima  
**Deputy Board Chairman**  
March 2020.



## FOREWORD

I am delighted to write the foreword for the 11<sup>th</sup> Water Utilities Performance Review Report (Regional and National Project WSSAs). Through 11 years of publication of the Water Utilities Performance Review Reports, EWURA has been updating the stakeholders and the general public on the growth of water and sanitation services in urban centres of the Regional and National Project service areas. This Report is prepared in compliance with Section 29(2) of the Water Supply and Sanitation Act, 2019 that mandates EWURA to prepare a comparative report of the licenced water supply and sanitation service providers annually.

This year's report provides a comparative analysis of the performance of 26 Regional WSSAs and eight (8) National Project WSSAs. Similar to the previous year, Kahama WSSA a District WSSAs has been included as Regional WSSAs due to its tremendous good performance compared to other District and Township WSSAs (DT WSSAs). This Report shows the performance of the RNP WSSAs by considering key performance indicators for provision of water and sanitation services such as water and sanitation services coverage, water supply service hours, metering ratio, staff productivity, non-revenue water and financial performance of RNP WSSAs. In addition, the report ranks the WSSAs' performance; and provides key observations and recommendations for improving water and sanitation services in the RNP WSSAs' operational areas.

Generally, the performance of RNP WSSAs in FY 2018/19 as compared to FY 2017/18 has shown improvement in the areas of water abstraction; water production; water and wastewater quality compliance; customer metering; water service coverage; staff productivity and water sales collections. Despite the mentioned improvements, the report has identified areas for improvement, which include addressing the issues of high non-revenue water; lack of sewerage systems; unreliable collection efficiency; inadequate number and qualified staff in NP WSSAs; and low utilization of water supply and sewerage network.

EWURA appreciates the invaluable comments and inputs received from the Ministry of Water, RNP WSSAs and other stakeholders during preparation of the report. Finally, EWURA congratulates RNP WSSAs that have shown improvement in performance and urge other RNP WSSAs to work hard to improve their performance.



Nzinyangwa E. Mchany  
**Acting Director General**  
March 2020

## ABBREVIATIONS AND ACRONYMS

BOD <sub>5</sub>	Five Days Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
DAWASCO	Dar es Salaam Water and Sewerage Corporation
DAWASA	Dar es Salaam Water and Sewerage Authority
EWURA	Energy and Water Utilities Regulatory Authority
HTM	Handeni Trunk Main
KASHWASA	Kahama Shinyanga Water Supply Authority
Majlis	Water Utilities Information System
MANAWASA	Masasi Nachingwea Water Supply and Sanitation Authority
MoW	Ministry of Water
NA	Not Applicable
NBS	National Bureau of Statistics
NP	National Project
NRW	Non-Revenue Water
pH	Potentiometric Hydrogen ion concentration
TBS	Tanzania Bureau of Standards
WSSA	Water Supply and Sanitation Authority
WSDP	Water Sector Development Programme

## Measurement Units and Symbols

km	kilometer
km <sup>2</sup>	square kilometer
kWh/m <sup>3</sup>	Kilowatt hours per cubic meter
m	meter
m <sup>3</sup>	cubic meter
m <sup>3</sup> /h	cubic meter per hour
m <sup>3</sup> /day	cubic meter per day
nr/km/year	number per kilometer per year
%	percent
TZS	Tanzania Shillings (except when used to refer water and wastewater quality Standards)

## DEFINITIONS OF KEY PERFORMANCE INDICATORS

NO.	INDICATOR	DEFINITION	UNIT
<b>WATER SUPPLY</b>			
i.	Accounts receivable collection period	This is the average duration in months the customers take to pay their bills. It is calculated by taking the total accounts receivable during the year divided by the total water and sewerage sales (bills) multiplied by 12. Best practice is a maximum of two (2) months.	Months
ii.	Administration costs per m <sup>3</sup> of water produced.	Total Administration costs (TZS) / total amount of water produced (m <sup>3</sup> ).	TZS/m <sup>3</sup>
iii.	Average hours of service.	Are the hours per day a consumer can draw drinking water from the tap at his household connection or the public stand post. The best practice is 24 hours.	Hours
iv.	Energy consumption	Energy consumption during the year / Total amount of water produced (m <sup>3</sup> ).	kWh/m <sup>3</sup>
v.	Mains failures	Number of mains (a pipe of diameter ≥ 2") failures leading into service interruption in a year / total mains length.	nr/km/year
vi.	Metering Ratio	The number of active water connections that have operating water meters expressed as a percentage of the total number of active water connections. Best practice is 100%.	(%)
vii.	Non-Revenue Water (NRW)	Is the amount of water that a water utility produces (or purchases from other water utilities) minus the amount that is sold to consumers, presented as a percentage of water produced and/or purchased. The recommended value is less than 20%.	(%)
viii.	Operating Ratio	Ratio of operating costs to operating revenues. Operational costs include all the expenses together with depreciation and interests costs (but no debt service payments). Sound financial management requires that this ratio should be less than 1.	Ratio
ix.	Overall Efficiency Indicator (OEI)	Actual collection expressed as a percentage of the value of total water production. OEI= Collection Efficiency x (1-NRW)	(%)
x.	Personnel expenditure per m <sup>3</sup> of water produced.	Is the ratio of total personnel expenditure (TZS) to the total amount of water produced (m <sup>3</sup> ).	TZS/m <sup>3</sup>
xi.	Personnel expenditure as % of current collection from water and sewerage bills	Total personnel expenditure in (TZS) expressed as a percentage of the total collection from current water and sewerage bills plus collections from other water and sewerage related services (excluding grants and subsidies).	(%)
xii.	Proportion of population living within the area with water network	The proportion of population living within the area with water network expressed as a percentage. It is obtained by dividing the population living within 200 meters from the water distribution pipe by the total population living in the service area.	(%)

NO.	INDICATOR	DEFINITION	UNIT
xiii.	Proportion of population served with water	Is a ratio of population served to the total population living in the service area expressed as a percentage. The population served is obtained by adding the following; (i) the number of domestic connections multiplied by the average members using that connection. (ii) the number of public stand posts and/or kiosks multiplied by the average number of the population served by public stand posts and/or kiosks (iii) the population living in residential institutions, industrial and commercial complex.	(%)
xiv.	Revenue Collection Efficiency	Is the ratio of total collection (TZS) to the total billings (TZS) during the year calculated as the Amount of Revenues Collected / Amount Billed x 100.	(%)
xv.	Staff Productivity	This indicator measures the Staff/1000 Water and Sewerage connections and is calculated as the ratio of total staff to total water and sewerage connections. Best practice is below 5	Staff/ 1000 Connections
xvi.	Storage capacity	Total capacity of treated water storage tanks (private storage tanks excluded) / average daily consumption x 24hours.	Hours
xvii.	Working Ratio	This is the ratio of operational expenses / operational revenue. The operational expenses do not include depreciation, interest and debt service. Sound financial management requires that this ratio should be well below 1.	Ratio
xviii.	Water Mains rehabilitation	Length of mains (a pipe of diameter $\geq 2"$ ) rehabilitated during the year / total length of mains x 100.	(%)
xix.	Water service connections rehabilitation	Number of service connections replaced or rehabilitated during the year / total number of connections x 100.	(%)
xx.	Water quality compliance	This indicator measures the % of the water samples that pass particular water quality tests for potability = Total Number of Samples Passed / Total Number of Samples Tested x 100.	(%)
<b>SEWERAGE</b>			
xxi.	Proportion of population connected to the sewerage service	Is the population served with sewerage service expressed as a percentage of the total population living in the service area. The population served is obtained by adding the following: (i) the number of domestic sewerage connections multiplied by the average members using that connection. (ii) The number of people living in residential institutions, industrial and commercial complex that are connected with sewerage services.	(%)
xxii.	Sewer blockages	Number of sewer blockages in a year / total length of sewer network.	nr/km of sewers/year
xxiii.	Wastewater quality compliance	This indicator measures the % of the sewerage effluent samples that pass particular quality tests as per TBS effluent quality standards: Total Number of Samples Passed / Total Number of Samples Tested.	(%)



## EXECUTIVE SUMMARY

### Introduction

The FY 2018/19 Water Utilities Performance Review Report for Regional and National Project WSSAs is the 11<sup>th</sup> performance review report to be prepared by the EWURA. The report analyses and compares the performance of 26 Regional WSSAs and eight (8) National Project WSSAs. Similar to the previous year, Kahama WSSA a District WSSAs has been included in this Regional WSSAs report due to its good performance compared to other Regional and National Project WSSAs (RNP WSSAs).

The main objective of this report is to show the achievements of RNP WSSAs by considering key performance indicators for provision of water and sanitation services. In addition, the report ranks the WSSAs' performance in provision of water services. Towards the end, the report provides key observations and recommendations with the view of improving water and sanitation services in their operational areas.

Data and information for preparation of the report were collected from RNP WSSAs through annual performance reports, monthly Majlis reports and consultative meetings that involved RNP WSSAs, MoW and EWURA. Also, clarifications sought from RNP WSSAs on their performance trend and findings during performance inspections conducted by EWURA, provided input to the report.

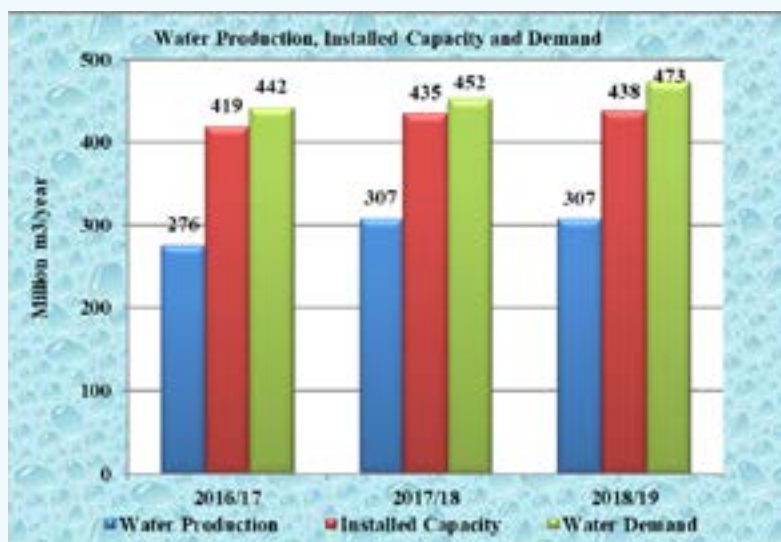
### Performance Highlights for Regional WSSAs

This section provide analysis of the performance of Regional WSSAs over the period from FY 2016/17 to FY 2018/19. It provides the performance highlights and information on some key indicators and data which are given in detail in the sections within this Report.

## Water Production, Installed Capacity and Water Demand

There has been an overall increase in water production, installed capacity and water demand among Regional WSSAs.

Generally, over the past three years, the water production, installed capacity and water demand increased by 11%, 5% and 7% respectively. Despite an overall increase in water production, yet there is still a gap between water production and water demand within Regional WSSAs' service area.



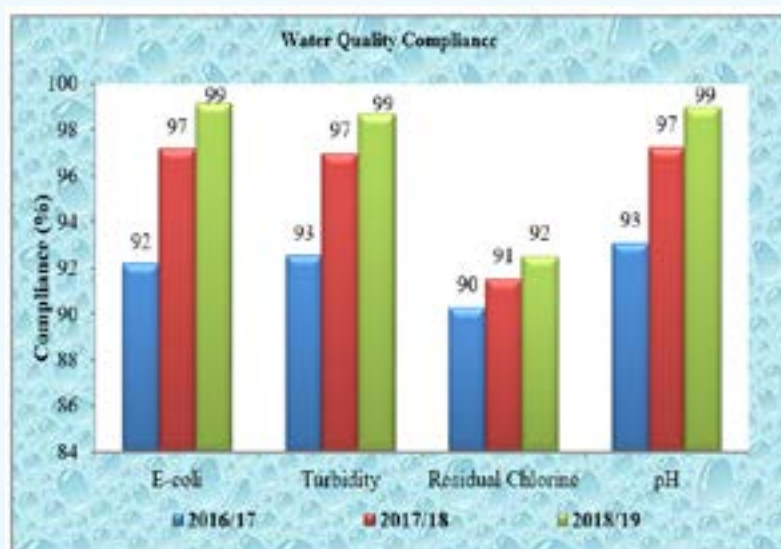
## Non-Revenue Water (NRW)

Over the past three years there has been a continuous slight increase in NRW among regional WSSAs. The NRW attained in FY 2018/19 is an increase of 2.2% as compared to the NRW attained in FY 2016/17. The overall NRW attained by Regional WSSAs over the past three years is not within the service level benchmark of below 20%.



## Water Quality Compliance

The water quality compliance in terms of pH, Turbidity, E-Coli and residual chlorine among Regional WSSAs has exhibited a continuous improvement. Compliance level increased by 6% for pH, 7% for Turbidity, 8% for E-Coli and 2% for residual chlorine. However, compliance level on E. Coli and residual chlorine has not reached the acceptable service benchmark level of 100% and 98% respectively.



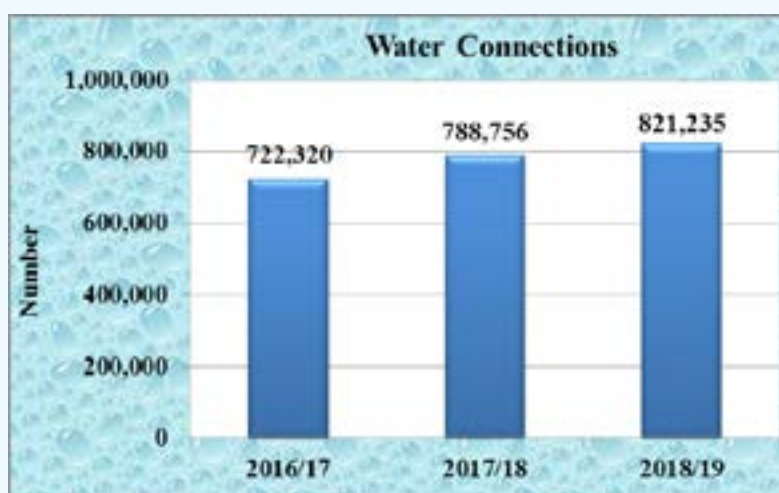
### Wastewater Quality Compliance

The overall compliance of effluent from wastewater stabilization ponds in terms of  $\text{BoD}_5$  improved by 11% from 55% reported in FY 2016/17 to 66% reported in FY 2018/19. On the other side, the overall compliance in terms of COD deteriorated by 4% from 66% reported in FY 2016/17 to 62% in FY 2018/19.



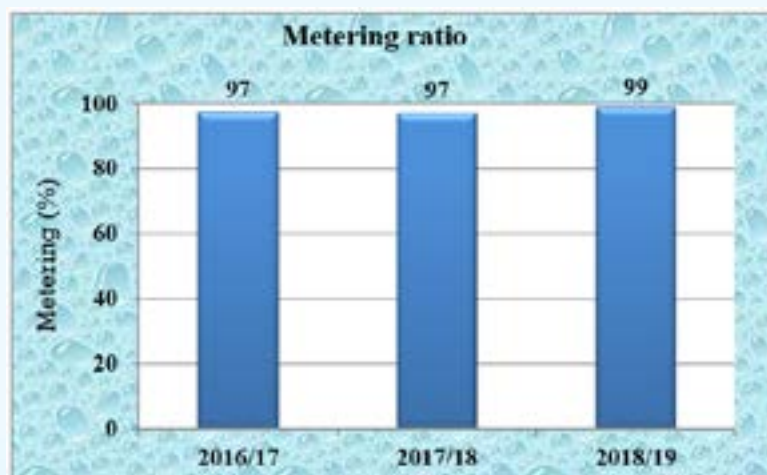
### Water Service Connections

Over the past three years overall water connections increased by 14% from FY 2016/17 to FY 2018/19 among Regional WSSAs. The increase is mainly due to efforts of Regional WSSAs to ensure that no one is left behind in water supply services.



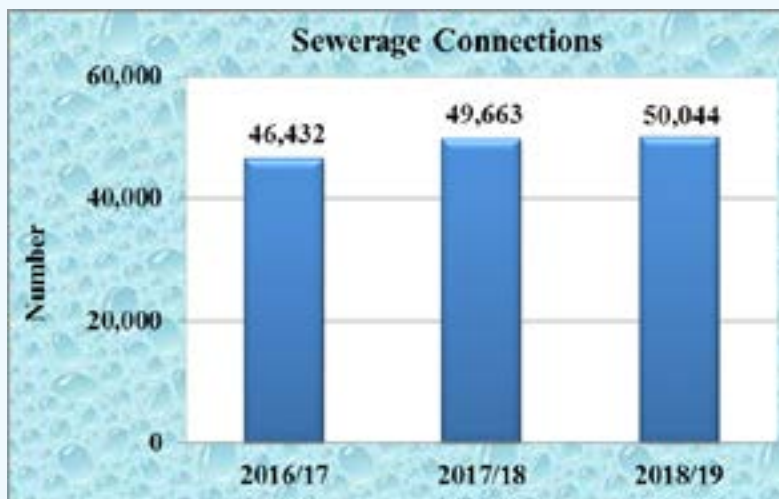
### Metering

The performance in metering ratio in FY 2018/19 has improved by 2% compared to FY 2016/17, the performance (97%) is close to service level benchmark of 100% customer metering.



### Sewerage Service Connections

Among the 26 Regional WSSAs, only 11 provide sewerage services. There has been a continuous increase in numbers of sewerage connections among Regional WSSAs. The total number of sewerage connections increased by 7% from FY 2016/17 to FY 2018/19.



### Water service coverage

Over the past three years, the water coverage in terms of the population living in the area with water network improved by 6% from FY 2016/17 to FY 2018/19. Water coverage in terms of population directly served with water decreased by 2% in FY 2017/18 and thereafter stagnated at 69% in FY 2017/18 and in FY 2018/19.



### Service Hours

Similar to FY 2017/18, the service hours has remained at 18 hours. The service level benchmark of 24 hours has not been met.



### Staff Productivity

The staff productivity in terms of staff per 1000 water and sewerage connections improved from 4.5 in FY 2016/17 to 4 in FY 2017/18 and maintained at 4 in FY 2018/19. The attained level are within the service level benchmark of below 5 staff per 1000 connections.



### Revenue Collection

The Revenue Collection among Regional WSSAs grew by 43% from TZS 205.74 billion in FY 2016/17 to 292.04 billion in FY 2018/19, the continuous growth in revenue among Regional WSSAs was mainly due to growth in customer base and tariff increase in order to meet the operation and maintenance costs.



### Revenue Collection Efficiency

The overall revenue collection efficiency for Regional WSSAs has been increasing annually. It has increased by 6% from FY 2016/17 to FY 2018/19. The challenge to most Regional WSSAs is to separate arrears and collection from current bills.



### Overall Efficiency Indicator

The recommended OEI should be more than 76% by considering NRW of 20% and the recommended collection efficiency of 95% or above. For the Regional WSSAs, the Overall

Efficiency Indicator (OEI) has improved by 8% from FY 2016/17 to FY 2018/19.



### Working Ratio

Over the past three years, the performance in terms of working ratio for Regional WSSAs deteriorated from 1.02 in FY 2016/17 to 1.08 in FY 2017/18 and thereafter improved to 0.97 in FY 2018/19. The recommended value for the working ratio is below one.



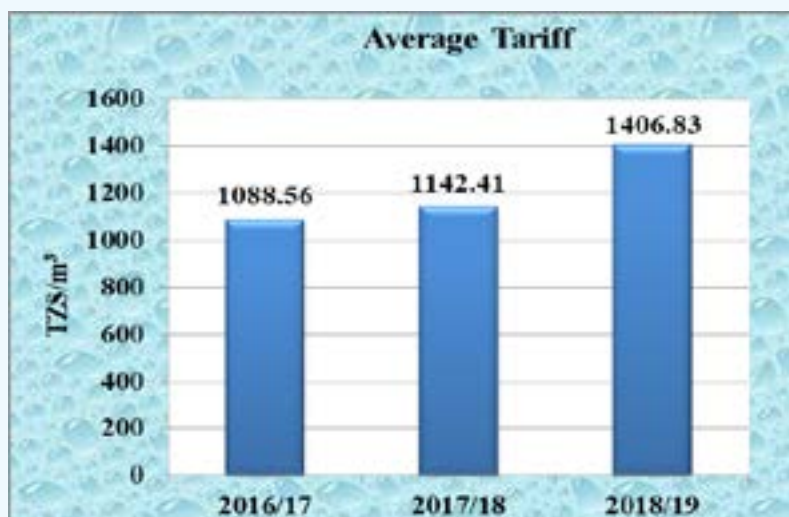
### Operating Ratio

The operating ratio for Regional WSSAs has declined from stagnated at 1.3 in FY 2016/17 and 2017/18 and thereafter slightly improved to 1.2 in FY 2018/19. Despite the improvement in operating ratio, the attainment is not yet within the recommended service level benchmark which is below 1.



### Average Water Tariff

There has been a continuous annual increase in overall average tariffs for Regional WSSAs. Average water tariff increased from TZS 1,088.56/m<sup>3</sup> in FY 2016/17 to TZS 1,406.83/m<sup>3</sup> in FY 2018/19.



### Compliance with Regulatory Directives and Requirements

This section presents a summary of compliance with regulatory directives requirements in terms of compliance with tariff conditions, reporting requirements and remittance of regulator levy as follows;

#### Tariff conditions compliance:

Compliance with Tariff Order is evaluated in terms of compliance with tariff conditions contained in the Tariff Orders of respective WSSA. The evaluation for compliance with Tariff Order for WSSAs of DAWASA, Mwanza, Kahama, Njombe, Bariadi and Mpanda were not included since their tariffs were outdated. During the year under review, the overall compliance with tariff conditions among Regional WSSAs was 67.8%. In FY 2016 /17 and 2017 /18, the compliance was 65% and 88% respectively.

	2016/17	2017/18	2018/19
Compliance with Tariff Order Conditions (%)	65	88	67.8
WSSAs full Complied with Tariff Conditions (No)	3	12	1

#### Reporting obligations:

Generally, the good performers in report submission were Kahama, Moshi, Mwanza, Songea, Tabora, Sumbawanga and Lindi WSSAs that managed to submit all the required reports timely. The least performer in the submission of the reports is Vwawa- Mlowo WSSA that did not comply with submission of all reports. The three years trend on the Regional WSSAs report submission status is shown in the following table.

#### Three Years Reports Submission Status for Regional WSSAs

	Required Number of Reports	2016/17	2017/18	2018/19
Number of Timely submitted Majls Monthly Reports	312	252	279	230
Number of Timely submitted Majls Annual Reports	26	13	20	20
Number of Timely submitted Technical Reports	26	20	21	19
Number of Timely submitted Financial Reports	26	20	21	24

### Compliance with Remittance of Regulatory Levy

There has been a continuous improvement among Regional WSSAs in terms of compliance with remittance of regulatory levy. The overall compliance with remittance of regulatory levy improved from 39% in FY 2016/17 to

45% in FY 2017/18 and 66% in FY 2018/19. The performance trend in terms of number of Regional WSSAs fully complying with remittance of regulatory levy improved from two (2) WSSAs in FY 2016/17 to five (5) WSSAs in FY 2017/18 and thereafter decreased to three (3) WSSAs in FY 2018/19.

### Performance Ranking for Regional WSSAs

Regional WSSAs were ranked in accordance with the EWURA Performance Benchmarking Guidelines for Water Supply Sanitation Authorities (2018). Based on the overall ranking criteria, the results of ranking the Regional WSSAs' performance are:

- Moshi WSSA emerged the overall best utility in the provision water supply and sanitation services while Vwawa-Mlowo WSSA was the overall least performer in the provision of water supply and sanitation services.
- Moshi WSSA was the best performer under the category of utility ranking in water services while Bariadi WSSA was the least.

A comparison of the overall performance of Regional WSSAs from FY 2016/17 to FY 2018/19 is shown in the following Table.

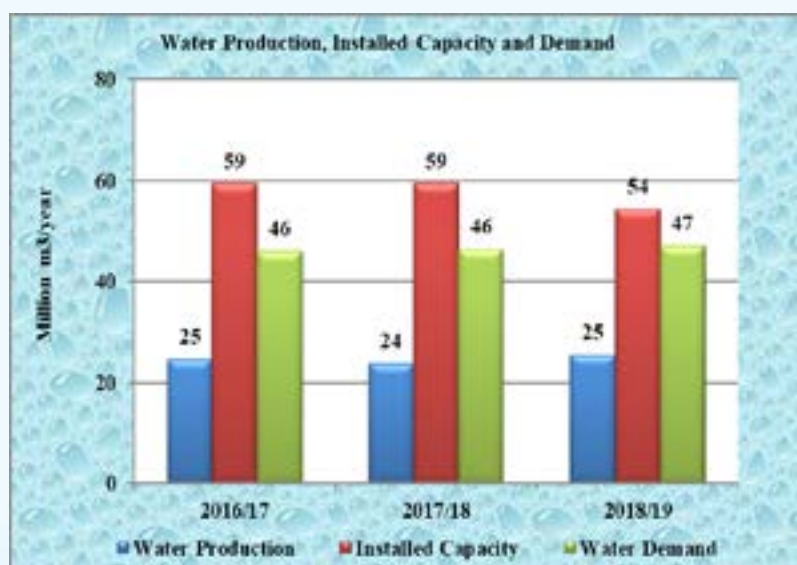
Overall Performance Summary			
Financial Year	2016/17	2017/18	2018/19
Number of Utilities Analyzed	25	25	26
Overall Performance in Percentage			
Excellent	8%	24%	4%
Very Good	52%	40%	23%
Good	20%	20%	46%
Fair	16%	16%	19%
Unsatisfactory	4%	0%	4%

### Performance Highlights For National Project WSSAs

This section gives a brief description of the performance of National Projects WSSAs over the past three years. Similar to the last FY 2017/18, KASHWASA has not been discussed in areas of water service coverage, metering ratio, water connections and staff productivity as it supplies water in bulk to other WSSAs and nearby villages.

### Water Production, Installed Capacity and Water Demand

NP WSSAs experienced uneven trend in water production for the past three years. The overall installed water production capacity has decreased by 5% in FY 2018/19 from FY 2016/17. The highest decrease in installed water production capacity was reported by Makonde WSSA with decrease in installed capacity from 8.9 million m<sup>3</sup>/year in FY 2016/17 to 3.9 million m<sup>3</sup>/year in FY 2018/19. The water demand grew by 1% from FY 2016/17 to FY 2018/19.



### Non-Revenue Water (NRW)

NP WSSAs have shown a positive improvement in reduction of NRW. The average NRW decreased by 9% in FY 2018/19 as compared to FY 2016/17. However, the service level benchmark, which is below 20% for Non-Revenue Water has not been attained.



### Water Quality Compliance

NP WSSAs have shown uneven trend on water quality compliance. The overall compliance from FY 2016/17 to FY 2018/19 has increased by 18% for turbidity, 12% for residual chlorine and 22% for pH. However, E-Coli compliance level dropped by 13% in FY 2018/19 as compared to FY 2016/17.



### Water Service Connections

For the past three years, the water service connections have continuously improved. The number of water connections for NP WSSAs has increased by 18% in FY 2018/19 from FY 2016/17 with 57% being contributed by MANAWASA and Mugango Kiabakari WSSAs.



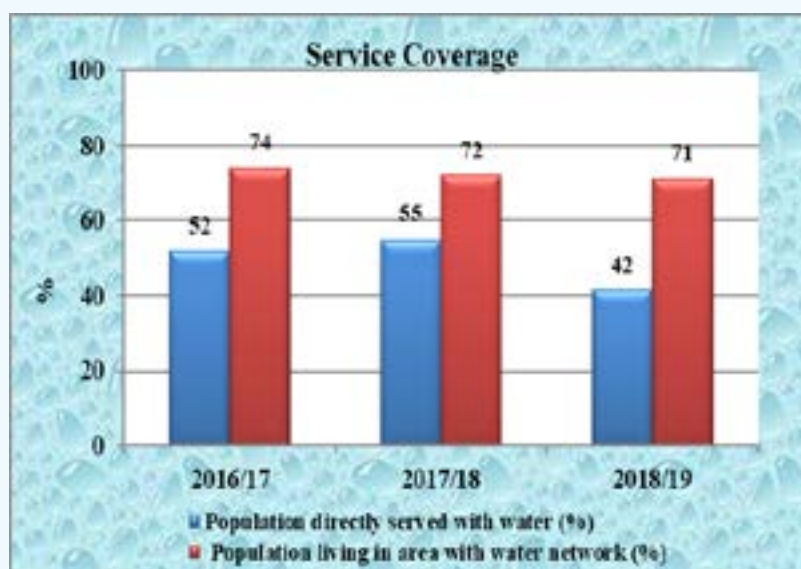
### Metering

The NP WSSAs have reported an improved metering ratio. The indicator has increased by 19% in FY 2018/19 as compared to FY 2016/17. However, the attained metering ratio does not comply with the service level benchmark that requires metering of all customers



### Water Service Coverage

Over the period of three years from FY 2016/17 to 2018/19, the indicators had decreased by 20% for population directly served and by 3% for population living in area with water network.



### Service Hours

The overall hours of service for NP WSSAs has shown improvement from 12 hours in FY 2016/17 to 14 hours in FY 2018/19. Generally, the overall service hours for NP WSSAs did not comply to the service level benchmark for service hours which is 24 hours of service per day.



### Staff Productivity

Over the past three years NP WSSAs have shown a continuous improvement on the number of Staff per 1000 total water connections. NP WSSAs improved from an overall improvement of 23.6 in FY 2016/17 to 17.9 in FY 2018/19.



### Revenue Generation

The overall revenue collection among NP WSSAs increased by 33% from FY 2016/17 to FY 2018/19. The overall improvement revenue collection is mainly due to the increase in number of customers.



### Revenue Collection Efficiency

Over the past three years the collection efficiency for NP WSSAs has experienced continuous improvement, it has increased by 13% in FY 2018/19 as compared to FY 2016/17.



### Overall Efficiency Indicator

The recommended OEI should be more than 76% by considering NRW of 20% and the recommended collection efficiency of 95% or above. Over the past three years the OEI for the NP WSSAs has improved by 9.7% from FY 2016/17 to FY 2018/19.



### Working Ratio

The working ratio for NP WSSAs experienced a continuous deterioration in the past three years. The working ratio deteriorated from 2.1 in FY 2016/17 to 2.6 in FY 2018/19. The deteriorating trend is associated with some of the NP WSSAs mixing capital related expenses in the operation expenses and not properly accounting grants especially revenue grants as per applicable accounting standards



### Operating Ratio

The operating ratio for NP WSSAs declined from 2.7 in FY 2016/17 to 4 in FY 2018/19. The decline in the indicator was due to increase in depreciation charges due to improvement in record keeping of such charges.



### Average Water Tariff

Generally, there is an increase in the average tariff among the NP WSSAs. The average tariff increased by TZS from 799 in FY 2016/17 to 1225 in FY 2018/19.



### Compliance with Regulatory Directives and Requirements

Similar to Regional WSSAs, this section presents a summary of compliance with regulatory directives and requirements in terms of compliance with tariff conditions, reporting requirements and remittance of regulator levy as follows;

#### Tariff conditions compliance:

There has been uneven trend in terms of compliance with tariff order conditions; from 53% in FY 2016/17 to 66.8% and 51% in FY 2017 /18 and 2018/19 respectively.

#### Reporting obligations:

During the year under review KASHWASA complied to all report submission, the least performer in the submission of the reports was Makonde WSSA that did not comply with timely submission of all reports.

#### Compliance with Remittance of Regulatory Levy:

During the year under review MANAWASA had the highest compliance with remittance of regulatory levy (90%). The least performers were Makonde, Maswa and Wanging'ombe WSSAs with 0% compliance.

### Performance Ranking for NP WSSAs

Similar to the Regional WSSAs, NP WSSAs were also ranked in accordance with the EWURA Performance Benchmarking Guidelines for Water Supply Sanitation Authorities (2018). Based on the overall ranking criteria, the results of ranking the NP WSSAs' performance are:

- KASHWASA WSSA emerged the overall best utility in the provision water services while Makonde WSSA was the overall least performer.
- KASHAWASA WSSA was the best performer under the category of utility ranking in water services while Makonde WSSA was the least.

### Implementation of the Recommendations of the Previous Report

The FY 2017/18 report recommended the Regional and NP WSSAs to:

- Prepare Water Safety Plans in accordance with the Guidelines published by MoW;
- Have in place an up to date business plans , ensure regular review of tariffs and improve operational

efficiency;

- (c) Implement strategies to ensure satisfactory pace of reduction of NRW and ensure that they are included in WSSAs Business Plans;
- (d) Initiate and implement projects for sewerage network extension; and
- (e) Ensure that there mechanisms of separating arrears and current collections.

### Major Observations and Recommendations

In the report, major observations are revealed in order for the WSSAs to improve water and sanitation services within the Regional and NP WSSAs service areas and the country as a whole. The FY 2017/18 report unveils major observations on the following issues:

- (a) high NRW;
- (b) lack of sewerage network;
- (c) unreliable water sales data.
- (d) Inadequate number and qualified Staff;
- (e) Low utilization of water supply and sewerage network; and
- (f) Increase of Non revenue water due to uncoordinated project with other sectors

In conclusion, generally, the performance of RNP WSSAs in FY 2018/19 as compared to FY 2017/18 has shown improvement in the areas of water abstraction; water production; water and wastewater quality compliance; customer metering; water service coverage; staff productivity and water sales collections. Despite the mentioned improvements, the report has identified areas for improvement, which include addressing the issues of high non revenue water; lack sewerage systems; unreliable collection efficiency; inadequate number of and qualified staff in NP WSSAs; and low utilization of water supply and sewerage network. RNP WSSAs need to implement recommendations regarding the identified issues and include them as part of their business plan targets. It is envisaged that implementation of the recommendations will result into improvement in water and sanitation services provided by RNP WSSAs.

## 1.0 INTRODUCTION

The FY 2018/19 Water Utilities Performance Review Report for Regional and NP WSSAs is the 11<sup>th</sup> comparison and analysis report prepared by EWURA. The report analyses and compares the performance of the past three years from FY 2016/17 to FY 2018/19 of 25 Regional WSSAs, Kahama WSSA, the only DT WSSA operating as a category A WSSA (in this report termed as Regional WSSA) and eight NP WSSAs.

For the first time, the report has included DAWASA instead of DAWASCO following enactment of the Water Supply and Sanitation Act, 2019 and the repeal of DAWASA Act. The enactment of Water Supply and Sanitation Act, 2019 and the repeal of DAWASA Act dissolved both DAWASA and DAWASCO and formed a new operator in the former DAWASA designated area that is also called DAWASA. In the previous reports, DAWASCO was included to represent all operations within DAWASA area following a Lease agreement between DAWASA and DAWASCO. For that case, the previous data for DAWASCO is adapted as the previous years data for DAWASA.

The main objective of this report is to show the achievements of Regional and NP WSSAs by considering key performance indicators for provision of water and sanitation services. In addition, the report ranks the WSSAs' performance in provision of water and sanitation services. Towards the end, the report provides key observations and recommendations with the view of improving water and sanitation services in the Regional and NP WSSAs' operational areas.

Data and information for preparation of the report were collected from Regional and NP WSSAs through annual progress reports, Majlis reports and consultative meetings that involved Regional WSSAs, NP WSSAs, MoW and EWURA. Also, clarifications sought from Regional and NP WSSAs on their performance trend and findings during performance inspections conducted by EWURA, provided input to the report.

This report is divided into four parts namely Part I: Performance Overview of Regional WSSAs; Part II: Performance Overview of National Project WSSAs; Part III: Implementation of Recommendations of the Previous Report (FY 2017/18) and Part IV: Key Observations and Recommendations. The appendices include profiles of WSSAs, tables showing performance data over the past three years and WSSAs compliance with regulatory directives.

### 1.1 Description of WSSAs

WSSAs are operating in accordance with Water Supply and Sanitation Act, 2019. During FY 2018/19 WSSAs were operating in accordance with Water Supply and Sanitation Act 2009. This report has taken into consideration the existence of Water Supply and Sanitation Act, 2019.

Upon their establishment and according to Section 14 of the Water Supply and Sanitation Act, 2019, the established Water Authorities are regulated by EWURA through licensing. Licences issued by EWURA are in three Classes; Class I, II and III. The superior class licence is Class I licence issued to a WSSA meeting technical, managerial and financial capabilities and are capable of doing investment using own funds. Currently, Tanga and Moshi WSSAs have Class I licences while the remaining Regional and NP WSSAs are operating using class III licences.

Further, according to Section 6(1) of the Water Supply Regulations, 2013 WSSAs are grouped into four categories, namely Category AA, A, B and C based on their financial capabilities. Table 1 is a list of water utilities discussed in this report and their respective categories.

**Table 1: WSSAs Included in the Report**

SN	Name of Utility	Category	Services Currently Provided	SN	Name of Utility	Category	Services Currently Provided
<b>Regional WSSAs</b>							
1	Arusha	A	Water and Sanitation	14	Tabora	A	Water and Sanitation
2	DAWASA	A	Water and Sanitation	15	Tanga	A	Water and Sanitation
3	Dodoma	A	Water and Sanitation	16	Bukoba	B	Water and sanitation
4	Iringa	A	Water and Sanitation	17	Kigoma	B	Water
5	Kahama	A	Water	18	Singida	B	Water
6	Mbeya	A	Water and Sanitation	19	Sumbawanga	B	Water and Sanitation
7	Morogoro	A	Water and Sanitation	20	Babati	C	Water
8	Moshi	A	Water and Sanitation	21	Lindi	C	Water
9	Mtwara	A	Water	22	Bariadi	C	Water
10	Musoma	A	Water	23	Geita	C	Water and Sanitation
11	Mwanza	A	Water and Sanitation	24	Mpanda	C	Water
12	Shinyanga	A	Water	25	Njombe	C	Water
13	Songea	A	Water and Sanitation	26	Vwawa- Mlowo	C	Water
<b>National Project WSSAs</b>							
1	Chalinze	C	Water	5	Maswa	C	Water
2	HTM	C	Water	6	Mugango - Kia-bakari	C	Water
3	KASHWA-SA	B	Bulk Water	7	Wanging'ombe	C	Water
4	Makonde	C	Water	8	MANAWASA	C	Water

**Key to Licence Class:**

<b>Class I</b>	A licence issued to a licensee who has a financial, technical and managerial capability to operate a licensed facility.
<b>Class II</b>	A licence issued to a licensee who has technical and managerial capability to operate a licensed facility and recovers all costs of operation except part of its investment cost.
<b>Class III</b>	A licence issued to a licensee who still gets financial, managerial and technical support from the Government and partially recovers its operational costs.

### Key to Category:

<b>Category AA:</b>	Water utilities with water service coverage of more than 85% and meet operation, maintenance costs, depreciation and return on investment
<b>Category A:</b>	Water utilities with water service coverage of more than 75% and meet all operation, maintenance and depreciation costs.
<b>Category B:</b>	Water utilities with water service coverage of more than 65% and meet all operation and maintenance costs.
<b>Category C:</b>	Water utilities with water service coverage of less than 65% and meet operation and maintenance costs except part of plant electricity costs as shall be determined in the Memorandum of Understanding.

## 1.2 Methodology

The preparation of this report involved a process of collection, compilation, analysis and verification of technical, commercial and financial data from Regional and National Project WSSAs. The data and information was obtained from monthly Majls reports, annual progress reports and financial statements. The validity of the data and information used to prepare this report was checked through the following processes:

- Verifying the submitted data and information based on the data and information obtained from regular inspection;
- Seeking clarification from utilities in cases where the data showed unusual trends as compared to previous reports or where the data or information seemed to be unrealistic, inconsistent or outright incorrect;
- Inviting all Managing Directors/Chief Executive Officers for a consultative meeting to discuss and confirm the data and information received prior to publication, a meeting that involved the representatives from the MoW; and
- Consultative meeting with MoW to discuss the draft report.

# **PART I:**

## **PERFORMANCE OVERVIEW OF REGIONAL WSSAs**

## 2.0 TECHNICAL OPERATIONS

Section 2.1 to 2.15 of this report covers analysis of technical operations of Regional WSSAs for the past three years. Regional WSSAs were analysed in terms of water sources and abstraction, installed water production capacity, water production, water demand, utilization of water storage and distribution infrastructure, water connections, water quality compliance and NRW reduction for water supply. It also provides technical analysis of sewer system, sewer connections, wastewater treatment facilities and wastewater quality monitoring.

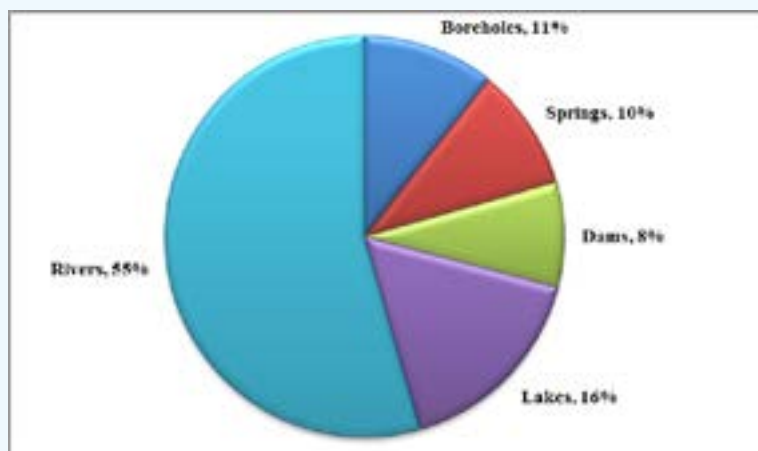


Figure 1: Water Abstraction

### 2.1 Water Sources and Abstraction

During FY 2018/19, rivers had the highest proportion of water abstracted by Regional WSSAs. The overall contribution of rivers was 181.75 Million m<sup>3</sup> equivalent to 55% of the total water abstracted by Regional WSSAs, 48% of the total water abstraction was by DAWASA, the biggest utility in terms of customer base that uses river Ruvu and Kizinga as among its water sources. The least type of water source used by Regional WSSAs were dams (8%). During FY 2018/19, dams were used as a source of water for Morogoro, Shinyanga, Tabora, Tanga, Geita and Mpanda WSSAs which all together contributed 15% of the total customer base among Regional WSSAs. Figure 1 indicate the overall water abstraction from various water sources while Appendix 2: Table A2.1(a) and A2.1(b) presents data for water abstraction and types of water sources used by each WSSA for three consecutive years. During FY 2018/19, the Regional WSSAs of Mtwara, Kigoma, Lindi, Bariadi and Geita recorded significant increase in water abstraction due to various reasons presented in Table 2. On contrary, significant decrease in water abstraction was recorded by Vwawa-Mlowo WSSAs which had a decrease of 25% compared to the amount of water abstracted in FY 2017/18.

Table 2: List of Regional WSSAs with Significant Increase in Water Abstraction

Utility Name	(%) Increase	Reason (s)
Lindi	138	<ul style="list-style-type: none"> <li>i. To meet demand due to extension of 12.23km of water distribution network at Mnazi Mmoja area and other area of the town leading to increase of number of customers.</li> <li>ii. Full operation of Ngapa water supply project compared to FY 2017/18 when the project operated for only four months (March 2018 to June 2018).</li> <li>iii. Reliable power supply which enabled increase in pumping hours for water supply ie 2190hrs in FY 2018/19 compared to 1440hrs in FY 2017/18.</li> </ul>
Bariadi	29	Increase in pump operation due to replacement of a submersible pump with capacity of 12m <sup>3</sup> /hr at Isanzu area.
Kigoma	27	Construction and operation of new water abstraction point at Amani Beach area with capacity 42,000m <sup>3</sup> /day through government support.

Utility Name	(%) Increase	Reason (s)
Mtwara	24	Reliable Power supply compared to FY 2017/18.
Geita	23	Under government support, construction and operation of three (3) new boreholes with total capacity 597.417 m <sup>3</sup> /day.

### Installed Water Production Capacity

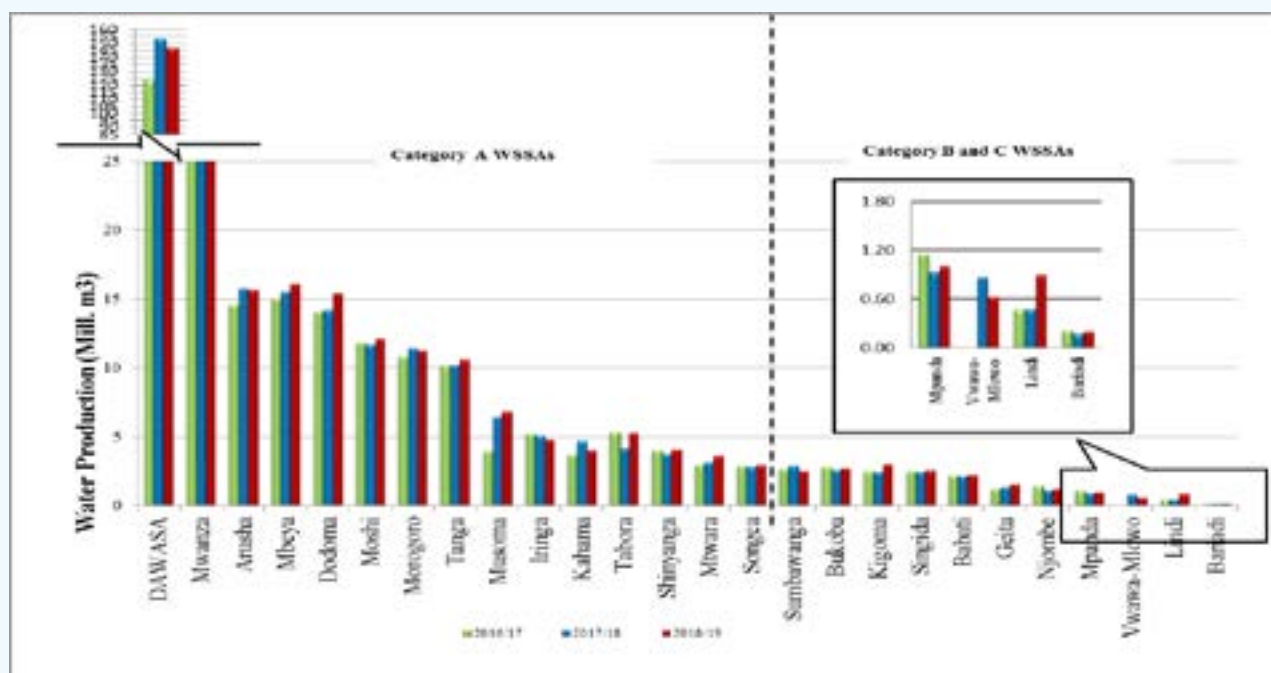
Over the past three years, the installed water production capacity among Regional WSSAs improved by 5% from 418.93 Million m<sup>3</sup> reported in FY 2016/17 to 438.09 Million m<sup>3</sup> reported in FY 2018/19 as presented in Table A2.2 of Appendix 2. During the reporting period, Kigoma and Babati WSSAs recorded the significant increase in water production capacity due to various reasons as provided in Table 3. However, Mpanda WSSAs reported a highest decrease in water production capacity (15%) among the Regional WSSAs caused by abandonment of Old Manga intake with capacity of 2,700m<sup>3</sup>/day due to low recharge/production. .

**Table 3: List of Regional WSSAs with Significant Increase in Installed Water Production Capacity**

Utility Name	Increase (%)	Reason (s)
Babati	21	Data correction as the data provided in FY 2017/18 was not realistic.
Kigoma	20	Completion of water supply project for improvement of water supply services in Kigoma town under the government support through Seven Towns Urban Upgrading Program.

## 2.2 Water Production and Measurement Methodology

The overall water production was reported to increased from 275.58 Million m<sup>3</sup> in FY 2016/17 to 307.33 Million m<sup>3</sup> in FY 2017/18 and thereafter decreased to 307.16 Million m<sup>3</sup> in FY 2018/19. Water production data for Regional WSSAs is shown on Figure 2 and detailed in Appendix 2 Table A2.2.



**Figure 2: Annual Water Production Trend**

During the reporting period, Tabora, Kigoma, Lindi and Bariadi WSSAs reported a significant increase in water production (more than 20%) as compared to FY 2017/18. Reasons for increase in water production for respective WSSAs is summarized in Table 4. Conversely, significant decrease in water production was reported by Vwawa Mlowo WSSAs.

**Table 4: List of Regional WSSAs with Significant Change in Water Production**

Utility Name	Increase (%)	Reason (s)
Lindi	90	Reliable power supply and increase in water production in order to meet increase number of new customers due to reliable water supply from Ng'apa water project.
Tabora	27	Increase in water production in order to meet increase in number of customers that were previously not served.
Kigoma	27	Improvement of water supply service after completion of the project for improvement of water in Kigoma town
Bariadi	20	Installation of submersible pump with capacity of 12m <sup>3</sup> /hr at Isanzu area

The Regional WSSAs were also assessed in terms of water production measurement methodologies. During FY 2018/19 the water production measurement methodologies among Regional WSSAs were either purely bulk water meter or a combination of bulk water meter and estimates. Out of 26 Regional WSSAs 22 WSSAs use bulk water meters and the remaining 4 uses both bulk water meter and estimates. There were no Regional WSSAs that purely estimated the amount of water produced. The number of Regional WSSAs and the methodologies for determining the amount of water produced is shown in Table 5 while Table 6 shows a list of WSSAs and the methodology that was used to determine water production in FY 2018/19.

**Table 5: Water Production Measurement Methodology among Regional WSSAs**

Description of Method	Number of utilities		
	FY 2016/17	FY 2017/18	2018/19
Bulk water meters	15	19	22
Bulk meters and estimates	8	6	4
Estimates	2	1	0
Total Number of WSSAs	25	26	26

**Table 6: Methods used by Regional WSSAs in the Determination of Water Production**

Description of Method	Utility Names	Number of utilities
Bulk water meters	Moshi, Tanga, Babati, Dodoma, Singida, Tabora, Iringa, Mbeya, Njombe, Sumbawanga, Songea, Mpanda, Arusha, Babati, Kigoma, Bukoba, Musoma, Shinyanga, Kahama and Geita, Lindi and Mtwara	22
Bulk water meters and estimates.	Vwawa-Mlowo, Mwanza and Bariadi, Morogoro	4

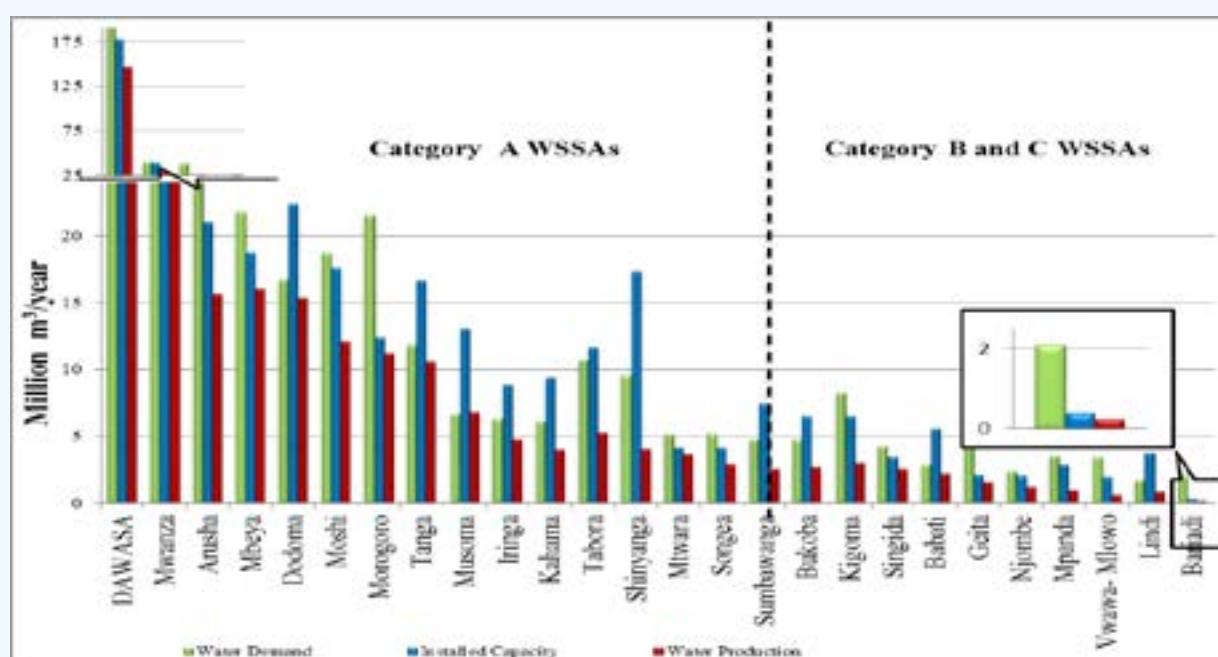
## 2.3 Water Demand

The overall water demand for Regional WSSAs increased from 441.97 Million m<sup>3</sup>/year in FY 2016/17 to 472.68 Million m<sup>3</sup>/year in FY 2018/19 equivalent of 7%. During FY 2018/19, the highest increase in water demand was reported by Morogoro WSSA (30%); followed by Mbeya WSSA (25%). The increase in water demand for

Morogoro WSSA was mainly due to the review of the per capita demand following a study for improvement of water supply services while the increase for Mbeya WSSA was due to inclusion of population of Mbalizi WSSA's operational area following clustering of Mbeya WSSA with Mbalizi WSSA that was operating as a Township WSSA. The water demand for the Regional WSSAs is presented in Table A2.2 of Appendix 2.

## 2.4 Comparison of Water Demand, Installed Capacity and Water Production

Water demand for Regional WSSAs has continued to surpass water production and installed water production capacity for the past three financial years. The ratios of water production to water demand and installed water production capacity have shown an increasing trend from FY 2016/17 to the year under review. The ratios of water production to water demand were 57%, 62% and 68% for FY 2016/17, 2017/18 and 2018/19 respectively. On the other hand the ratio for water production versus installed capacity were 65%, 66% and 71% for 2016/17, 2017/18 and 2018/19 respectively.



**Figure 3: Comparison of Water Demand, Installed Capacity and Water Production**

Despite an improvement in the installed water capacity, there is a need for WSSAs to ensure that they utilize the available water production capacity in order to meet the water demand.

## 2.5 Utilization of Water Supply Networks

Utilization of water supply network was analysed in terms of the number of connections in a kilometer of water supply network. Utilisation of water network has shown an even trend over the past three years. The number of connections per km length of water network decreased from 52.4 in FY 2016/17 to 52.7 in FY 2017/18 and thereafter decreased to 51.9 in FY 2018/19. WSSAs are advised to ensure that they utilize the available network by ensuring more customers are connected. The detailed trends of water connection per km length of water network for Regional WSSAs are presented in Table A2.3 of Appendix 2 and illustrated in Figure 4.

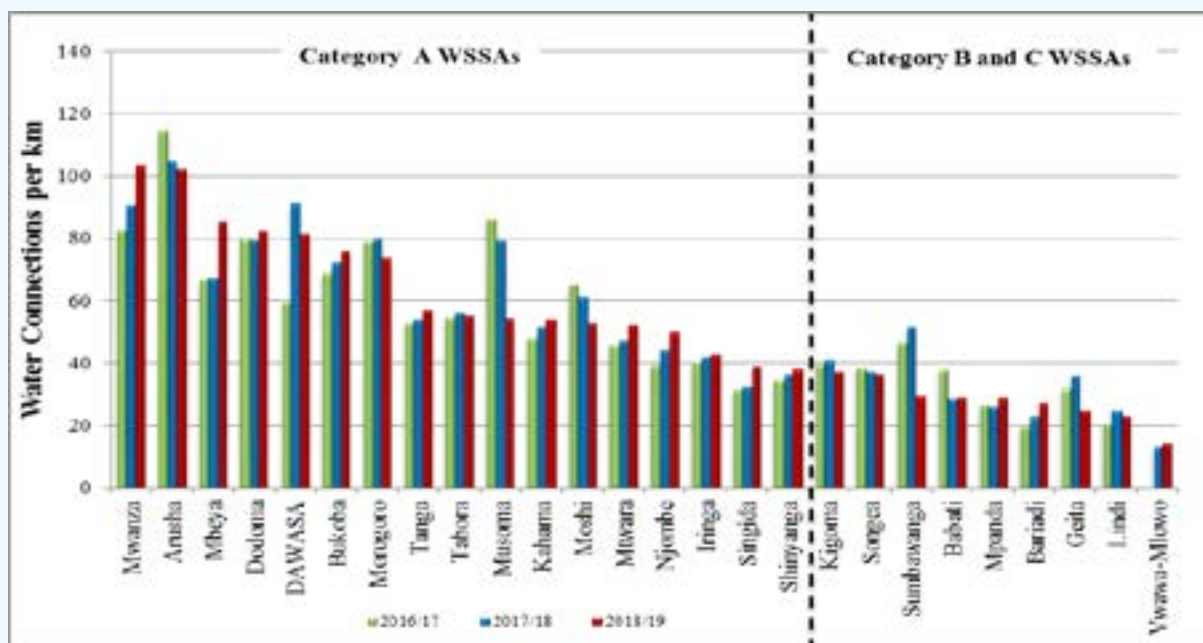


Figure 4: Number of Water Connections per km length of Water Distribution Network

## 2.6 Water Mains Rehabilitation

Water mains rehabilitation exhibited uneven trend from 2.2 % in FY 2016/17 and thereafter decrease to 1.5% in FY 2017/18 and increased to 1.8 % in FY 2018/19. Morogoro, Arusha and Bukoba WSSAs recorded the highest number of water mains rehabilitation at 8.8 %, 5.6 % and 5.0 % respectively. Conversely, Geita, Lindi, and Sumbawanga WSSAs did not perform any rehabilitation on water mains during the year under review. The water mains rehabilitation depends on various factors including the condition of the water main network and the availability of funds. The detailed trends of the water mains rehabilitation Regional WSSAs illustrated in Figure 5.

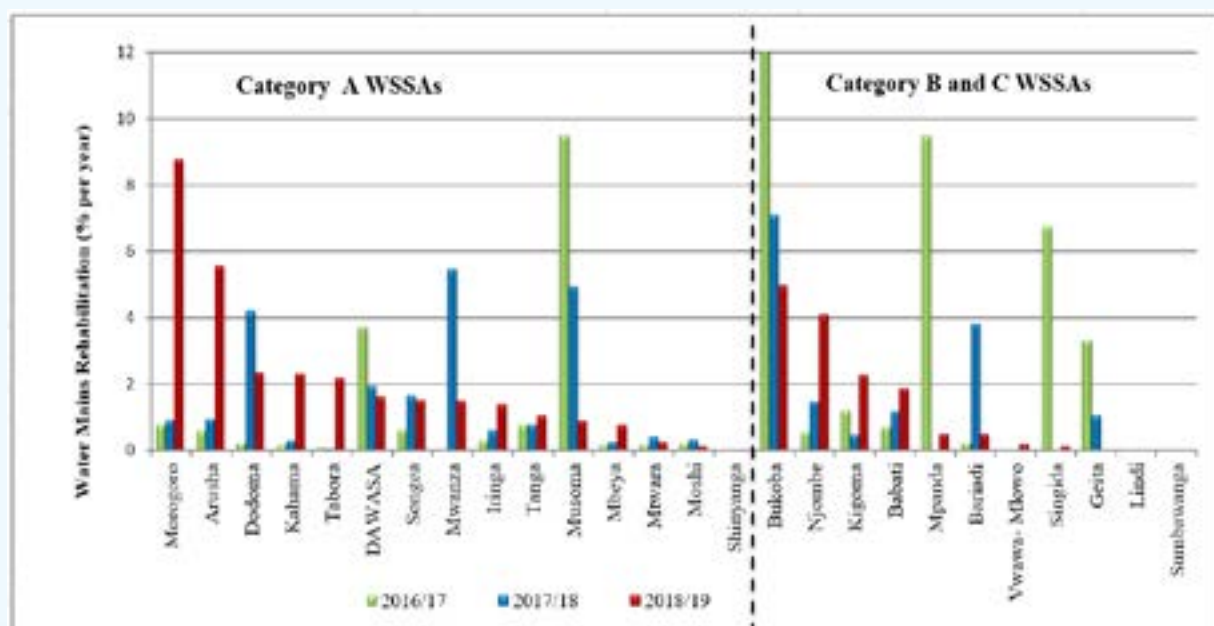
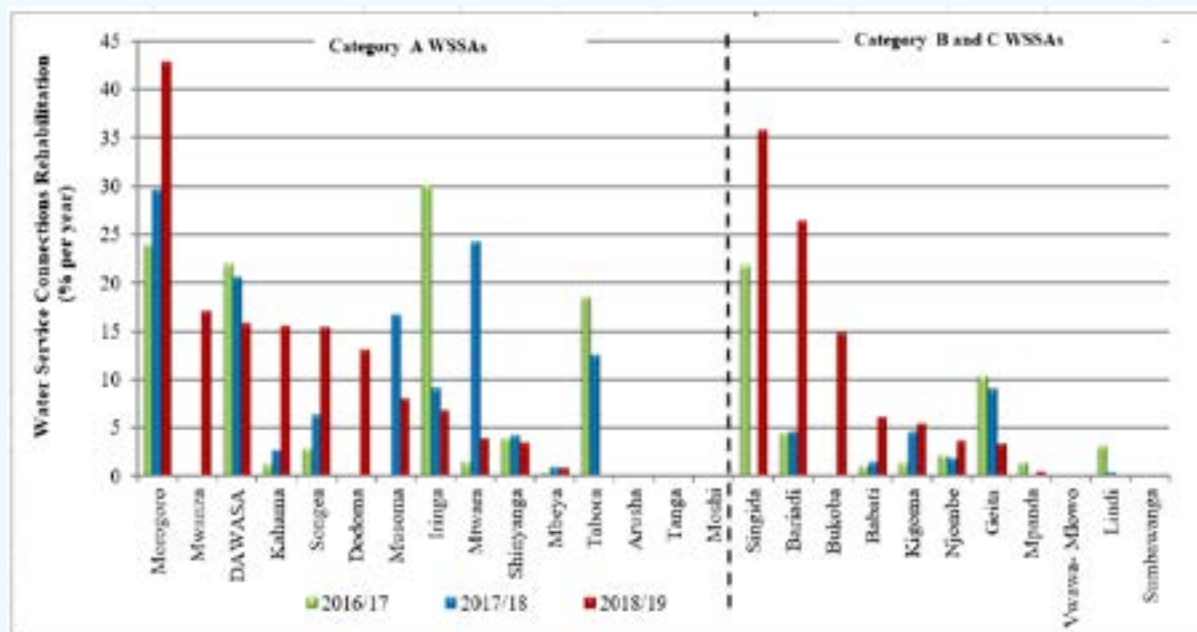


Figure 5: Water Mains Rehabilitation

## 2.7 Rehabilitation of Water Service Connections

Rehabilitation of water service connections is one of the strategies to reduce the NRW. The percentage of connections rehabilitated by WSSAs increased from 5.8 % reported in the past two consecutive years to 9.3 % during FY 2018/19 is illustrated in Figure 6.



**Figure 6: Rehabilitation of Water Service Connections**

Morogoro WSSA recorded the highest percentage of water service connections rehabilitated in FY 2018/19 followed by Singida, Bariadi, Mwanza, DAWASA, Kahama and Songea. Conversely, Tanga, Arusha, Moshi, and Sumbawanga did not performed water connections rehabilitation in FY 2018/19. Table 7 indicated WSSAs that had significant increase in rehabilitation of water service connections (more than 10% increase) in FY 2018/19 as compared to FY 2017/18.

**Table 7: WSSAs with significant increase in number of water service connection rehabilitation**

Utility Name	Increase (%)	Reason (s)
Singida	35.8	Singida WSSA established a dedicated task force for leakage repair to curb with NRW. The task force among others were conducting rehabilitation in order to prevent NRW.
Bariadi	26.5	Rehabilitation of water service connection was conducted as one of the special programs to curb an increase in NRW.
Bukoba	14.8	Fixing the connections within the service lines that were disrupted during construction of street roads in Bukoba. The most affected areas were Nshambya, Kamazi and Rwamishenyi.
Mwanza	17.1	Fixing of service connection that were cut together with the service lines during construction of street roads in Mwanza. The most affected areas were Mkolani, Buhongwa, Nyasaka, Buswelu and Kiseke.
Morogoro	13.3	Aged flow meters and serviced connections were rehabilitated to curb NRW through WSSA own fund.

Utility Name	Increase (%)	Reason (s)
Dodoma	13.2	In previous years minor rehabilitations were sometimes not recorded, also differentiation between repair and rehabilitation was not clear.
Kahama	12.8	Fixing of service connection and service lines that were disrupted during construction of street roads in Kahama. The most affected areas were Muhongolo, Nyashimba, Majengo, and Nyakato.

## 2.8 Non-Revenue Water (NRW)

Analysis of NRW is based on (a) NRW computed as percentage of water production; (b) NRW computed as volume of water loss per Kilometer of pipe network per day; and (c) NRW computed as volume of water loss per water connection per day. The results of the computations of the indicators are presented in Table A2.4 of Appendix 2:

### (a) NRW as a Percentage of Water Production

The best performers in NRW as a percentage of water production were Kahama WSSA (12.4 %) followed by Shinyanga (13.3 %) and Songea (20.33%) WSSAs. For the past two consecutive years Kahama and Shinyanga WSSAs continued to be the only WSSAs that attained the service level benchmark for NRW (below 20%). The NRW as a percentage of water production is presented in Figure 7.

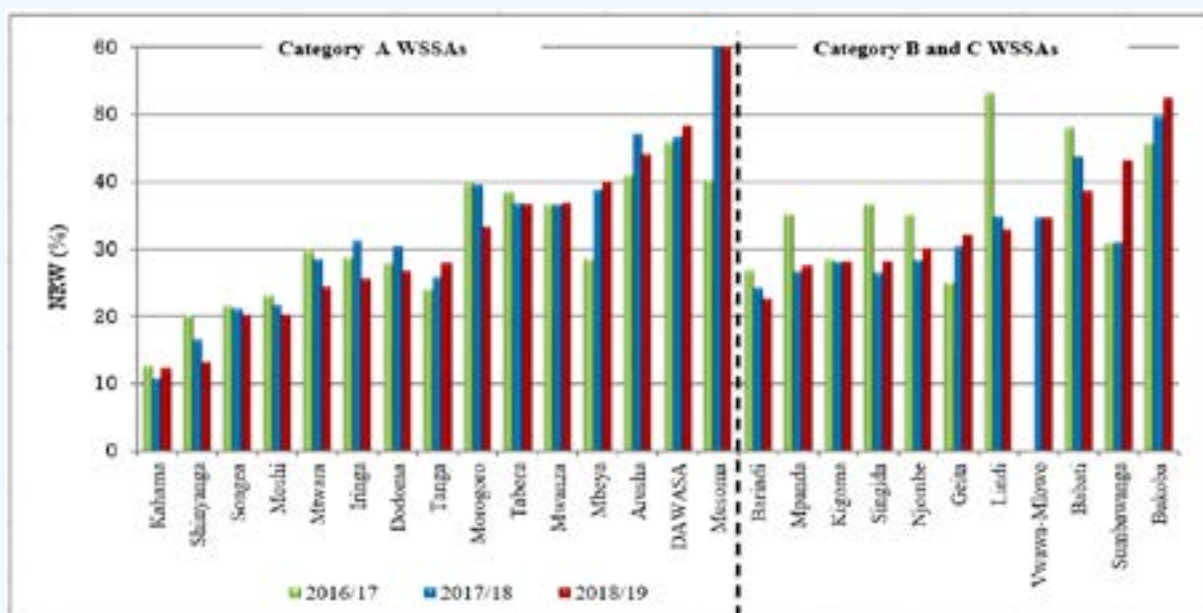


Figure 7: Non-Revenue Water (as percentage of water production)

The accuracy of NRW as percentage of water production depends highly on the availability of operating bulk water meters at all water production points and having all customer water connections metered.

- During FY 2018/19, out of 26 Regional WSSAs, NRW as percentage of water production from 12 WSSAs were reliable in terms of having reliable methodologies for determining the amount of water produced and the amount of water billed.
- The NRW as percentage of water produced for 14 WSSAs namely DAWASA, Songea, Musoma, Bukoba, Kigoma, Morogoro, Vwawa-Mlowo, Mwanza, Sumbawanga, Lindi, Geita, Mpanda, Njombe and Bariadi is unreliable as they either unmetered their water production points or they have not metered all their customer water connections.

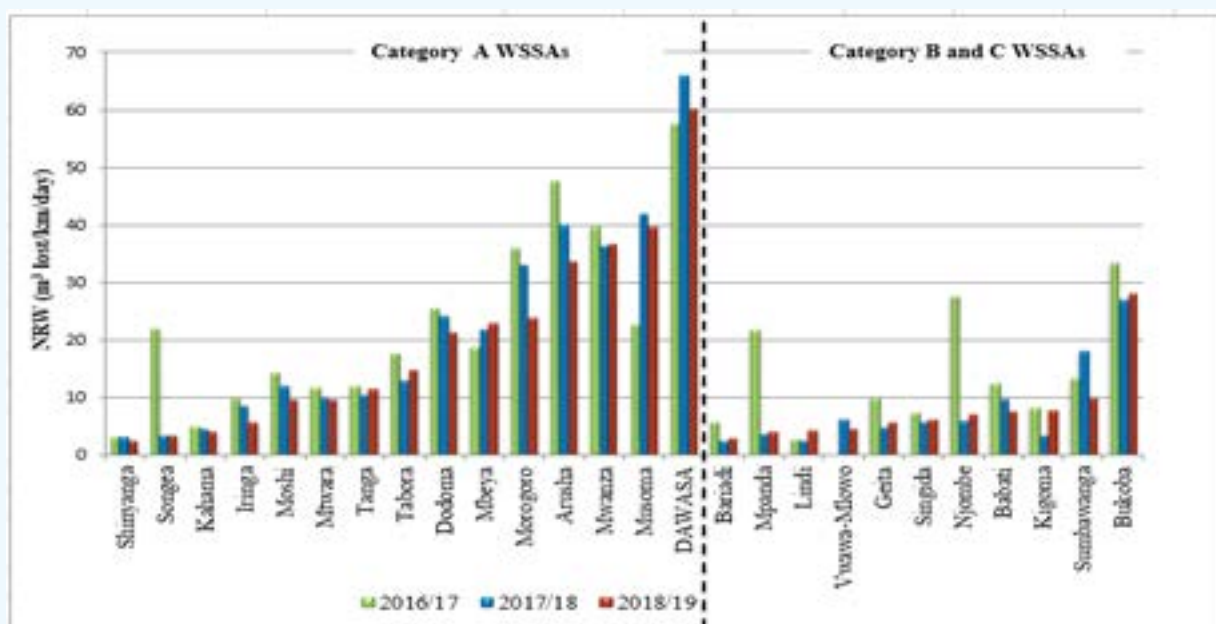
- iii. Morogoro, Iringa and Babati WSSAs attained major improvement in NRW for FY 2018/19 as compared to FY 2017/18. The reasons for the improvement for each WSSA is presented in Table 8. On the other hand, Sumbawanga WSSAs recorded major deterioration in performance of NRW as percentage of water production. NRW for Sumbawanga WSSAs increased from 31% recorded in FY 2017/18 to 43.2 % recorded in FY 2018/19. The major reason for the increase in NRW was the improvement in determination of NRW data.
- iv. Musoma, Bukoba, DAWASA, Arusha, Sumbawanga and Mbeya WSSAs were the least performers in terms of NRW as percentage of water productions. The NRW recorded by the WSSAs in FY 2018/19 were 60.0 %, 52.6 %, 48.4 %, 44.1 %, 43.2 %, and 40.1 % respectively.

**Table 8: List of Regional WSSAs with Significant Improvement in NRW**

Utility Name	Change (%)	Reason (s)
Morogoro,	6.2	Rectification of anomalies in billing system and rehabilitation of water service connections.
Iringa	5.6	Application of interventions in NRW Reduction Strategy through replacement of aged customer water meters, reallocation of customers' water meters for accessibility by meter readers, replacement of two aged float valves at tanks to control over flow, improvement in response to leakages and control of night pressure in the distribution system.
Babati	5.1	Replacement of customer water meters (551) and rehabilitation of 5.89 km of dilapidated water networks.

**(b) NRW in Cubic Meter per Kilometer per Day**

NRW per kilometre per day improved continuously for the past three years from 18.8 m<sup>3</sup>/km/day, 16.2m<sup>3</sup> /km/day and 15.1m<sup>3</sup>/km/day recorded in FY 2018/19. The NRW per kilometre per day of each Regional WSSA are shown in Appendix 2: Table A2.4 and illustrated in Figure 8.



**Figure 8: NRW in m<sup>3</sup> loss per km per day**

- i. During FY 2018/19, Shinyanga, Bariadi and Songea were the good performers in NRW per km per day. However, the NRW data for Songea and Bariadi WSSAs is not reliable because WSSA has not attained universal metering.
- ii. The least performers in NRW per km per day in FY 2018/19 were DAWASA, Musoma, Mwanza and Arusha WSSAs. The reported NRW per km per day for the mentioned utilities were 60.3, 40.0, 37.0 and 33.9 m<sup>3</sup>/km/day respectively.

### (c) NRW in Cubic Meter per Connection per Day

This indicator measures water loss per day in relation to the number of water connections. The recorded average NRW in m<sup>3</sup> per connection per day for WSSAs was at 0.28 for the two consecutive years FY 2016/17 and FY 2017/18 and thereafter slightly improved to 0.26 during FY 2018/19. The improvement was attributed by the increased connections, rehabilitation of main water pipelines and service-line connections, as shown in Figure 9.

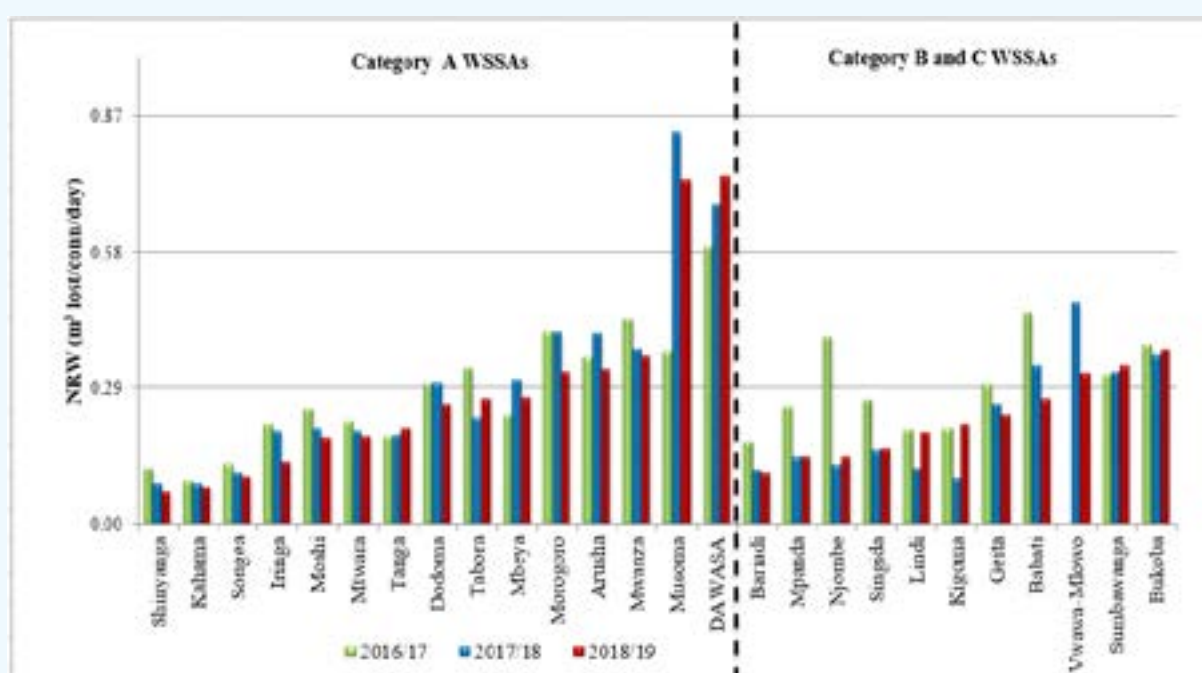


Figure 9: NRW in m<sup>3</sup> per connection per day

- i. Shinyanga, Kahama and Songea WSSAs were best performer under the indicator by attaining 0.07, 0.08 and 0.1 m<sup>3</sup> per connection per day respectively. The utilities have continuously been best performers for the three consecutive years. Shinyanga and Kahama WSSA depend mostly on bulk purchased water from KASHWASA, thus utilities concentrates their operations into ensuring efficiency in the distribution network.
- ii. Major improvement in NRW per connection per day was attained by Iringa, Vwawa - Mlowo WSSAs who improved their performance by 32% followed by Babati and Morogoro by 21 % as compared to the performance of the previous year. Conversely Kigoma, Lindi and Njombe deteriorated their performance by 120%, 62% and 12% as compared to the previous year
- iii. DAWASA and Musoma WSSAs were the least performer by recording 0.74 m<sup>3</sup> per connection per day followed by Mwanza and Arusha who recorded 0.36 and 0.33 m<sup>3</sup> per connection per day respectively. DAWASA, Musoma and Arusha WSSA have been among the least performers under the indicator for three consecutive years.

#### (d) Overall Performance in NRW Management

The overall good performers in NRW is analysed in terms of good performers in NRW as percentage, NRW per km per day and NRW per connection per day. During FY 2018/19, the overall good performers in NRW management were Shinyanga, Kahama and Songea WSSAs. On the other hand, DAWASA, Musoma and Arusha WSSAs were the least performers in overall NRW Management. The results of NRW as reported and analyzed for the best and least performing utilities are summarized in Table 9.

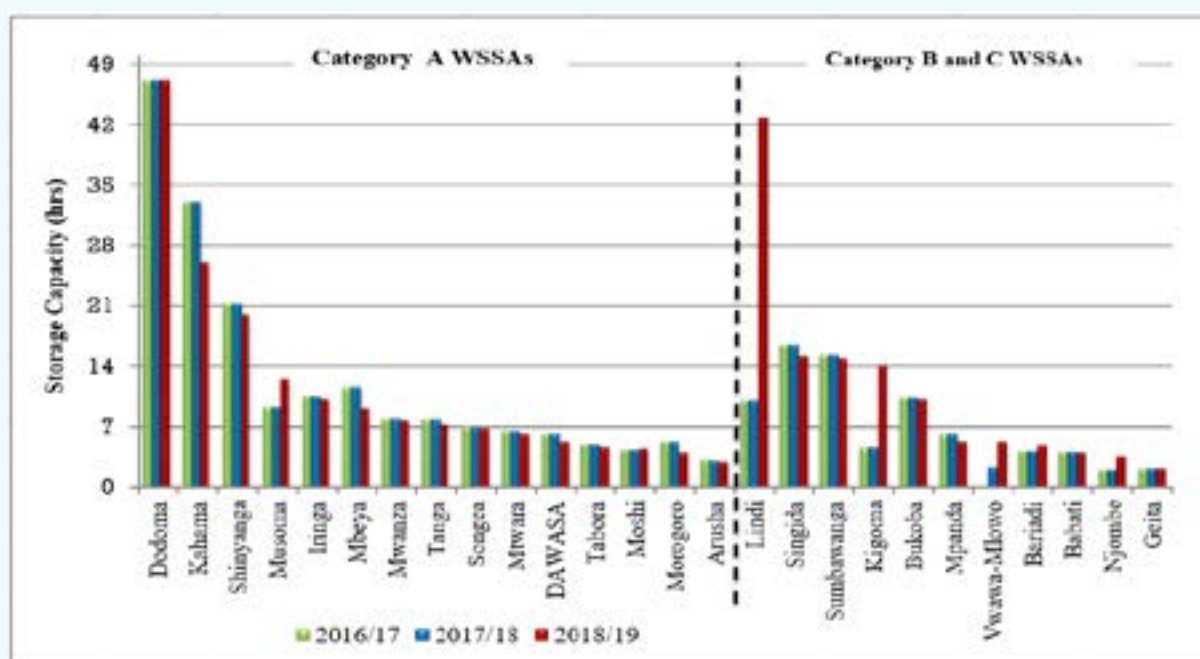
**Table 9: NRW Management Performance**

Good Performers				Least Performers			
Name of WSSA	NRW (%)	NRW (m <sup>3</sup> / km/day)	NRW (m <sup>3</sup> / connection/day)	Name of WSSA	NRW (%)	NRW (m <sup>3</sup> loss / km/day)	NRW (m <sup>3</sup> loss / connection/day)
Kahama	12.40	4.23	0.08	DAWASA	48.4	60.27	0.74
Shinyanga	13.25	2.75	0.07	Musoma	59.98	40	0.74
Songea	20.33	3.67	0.10	Arusha	44.11	33.94	0.33

*Note: the NRW as percentage of water production for Songea WSSA, Musoma WSSA and DAWASA is not reliable, as it has not attained universal metering.*

## 2.9 Adequacy of Water Storage Capacities

The recommended storage capacity according Ministry of Water Design Manual (2009) is at least seven hours of WSSA's daily demand. A detailed trend on the storage capacities for Regional WSSAs is presented in Table A2.3 of Appendix 2 and illustrated in Figure 10.



**Figure 10: Storage Capacities**

- During FY 2018/19, Dodoma, Lindi, Kahama, Shinyanga, Singida, Sumbawanga, Kigoma, Musoma, Bukoba, Iringa, Mbeya, Mwanza and Tanga WSSA had their storage capacity within the recommended value of at least 7 hours.

- ii. Lindi and Kigoma WSSAs attained the major improvement in storage capacity with increase in storage capacity from 10.1 hours attained in FY 2017/18 to 43 hours in FY 2018/19 for Lindi WSSAs; and an increase from 4.7 to 14.3 hours for Kigoma WSSA. The improvement in storage capacity for Lindi was due to addition of central tank (3,000 m<sup>3</sup>) and New Mtanda tank (2,000 m<sup>3</sup>) while for Kigoma was also due to addition of new storage tanks.
- iii. The least performers were Geita, Arusha and Njombe WSSAs with storage capacities of 2.4 hours, 3.1 hours and 3.8 hours respectively.

## 2.10 Sanitation Services

WSSAs are obliged to provide sanitation services including ensuring safe treatment and disposal of sewage in their service areas. In this section; sewage treatment and disposal will be analysed by looking at the Regional WSSAs that has sewerage network and WSSAs that do not have sewerage network but they have sewage treatment facilities. The WSSAs will also be analysed in terms of utilization of sewerage network in terms of number of connections per km of the sewer and performance of sewerage network in terms of number of sewer blockages.

### (a) Regional WSSAs Operating Sewerage Network

Out of 26 Regional WSSAs, only 11 WSSAs have constructed sewerage network. As compared to FY 2017/18, there is no improvement in terms of number of Regional WSSAs with sewerage network. The Regional WSSAs having sewerage network are presented in Table 10.

**Table 10: Summary of Status of Sewerage Network**

Regional WSSAs with Sewerage Network	Regional WSSAs without Sewerage Network
Arusha, Tanga, Dodoma, Moshi, Morogoro, Mwanza, Iringa, Songea, Mbeya, Tabora and DAWASA	Kahama, Shinyanga, Mtwara, Musoma, Singida, Lindi, Kigoma, Mpanda, Babati, Bukoba, Sumbawanga, Njombe, Bariadi, Geita and Vwawa-Mlowo

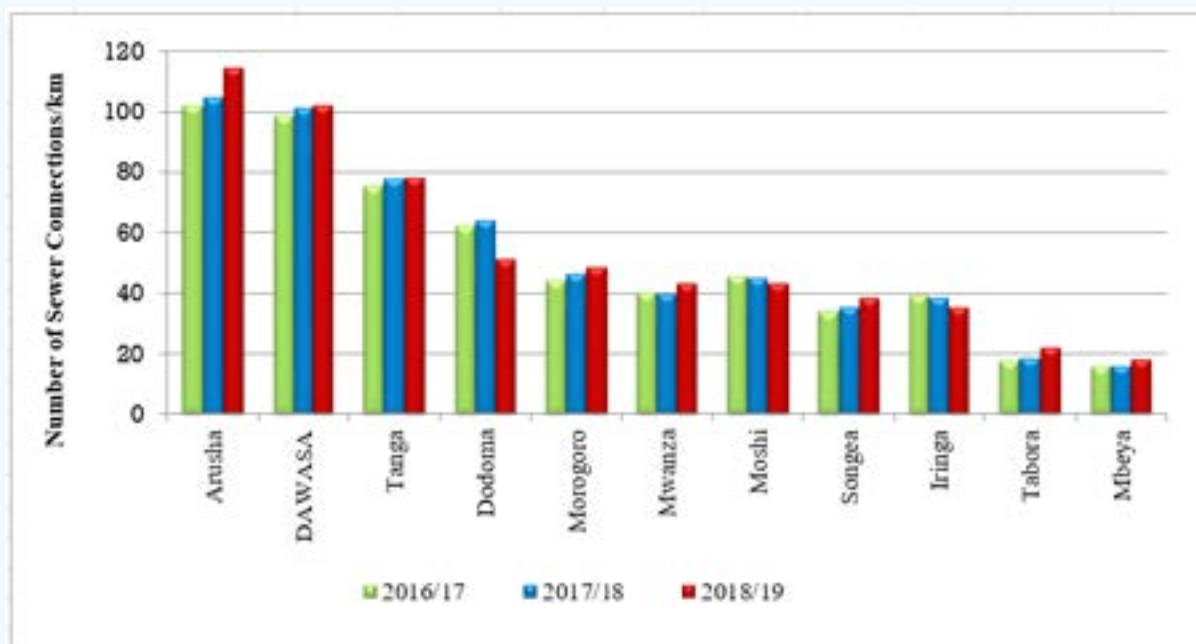
### Utilization of Sewerage Networks

A comparison of the number of connections per kilometer of a sewerage network shows a slight improvement from 52.18 in FY 2016/17 to 53.29 FY 2017/18 and 53.96 during FY 2018/19. An overall increase in connection density was due to increase in demand relative to insignificant investment in increasing sewerage network coverage. Appendix 2: Table A2.5 provides the detailed trend of this indicator for the past three years for Regional WSSAs and illustrated in Figure 11.

### Performance of Sewer Networks

Performance of sewer networks has been analyzed in terms of frequency of sewer blockages in a kilometer length of the sewer network expressed as the number of blockages/km/year.

- i. Despite a slight improvement in terms of sewer blockage per kilometer of sewerage network from 19.93 blockages per kilometer to 17.94 blockages from FY 2016/17 to FY 2017/18 the indicator has deteriorated to 18.06 in FY 2018/19.
- ii. For the past two years, Mbeya WSSA became the best performer under the indicator. On the other hand, the highest number of sewer blockage per kilometer per year were recorded by Morogoro WSSA (27.7 blockage/km/year) followed by Iringa (23.97 blockage/km/year), Mwanza (23.59 blockage/km/year), Moshi (23.55 blockage/km/year), and Dodoma (23.05 blockage/km/year), WSSAs. Appendix 2: Table A2.5 provides the detailed trend of this indicator for the past three years for Regional WSSAs and illustrated in Figure 11.



**Figure 11: Number of sewer blockage per kilometre of sewerage network**

**(b) Sewage Treatment facilities**

- Out of 26 Regional WSSAs, 15 WSSAs had sewage treatment facilities (wastewater stabilization ponds), two have started construction of the wastewater treatment facilities and other seven have acquired land for construction of wastewater treatment facilities. Among the Regional WSSAs that acquired land for construction of wastewater treatment facilities, DAWASA has a plan of constructing additional wastewater treatment facilities.
- Tanga has a sewerage network but currently disposing the sewage directly to the Indian Ocean. However, they have acquired land for construction of the wastewater treatment facilities.
- Bariadi, Mpanda, Singida and Vwawa-Mlowo WSSAs have neither wastewater treatment facilities nor have they acquired land for construction of the facilities. Table 11 represent a summary of status of sewerage disposal facilities in regional WSSAs.

**Table 11: Summary of Status of Sewage Disposal Facilities in Regional WSSAs**

WSSAs with Sewerage Network and Wastewater treatment Facilities	WSSAs with Sewerage Network but no Wastewater treatment Facilities	WSSAs without Sewerage Network but have Sludge Digesters	WSSAs with on-going construction of Wastewater treatment facilities	WSSAs that have acquired land for construction of wastewater treatment facilities	WSSAs without Sewerage Network, Wastewater treatment Facilities and have not acquired land
Arusha, Dodoma, Moshi, Morogoro, Mwanza, Iringa, Songea, Mbeya, Tabora and DAWASA	Tanga	Sumbawanga, Bukoba, Geita, Kigoma, Musoma	Lindi Kahama	DAWASA (construction of additional waste water treatment plant), Mtwara, Njombe, Tanga, Babati, Shinyanga and Babati.	Vwawa-Mlowo, Singida, Bariadi & Mpanda.

## 2.11 Water Quality Monitoring

Water quality compliance was analysed in terms of E-Coli, Turbidity, Residual Chlorine and pH. The EWURA Performance Benchmarking Guidelines for Water Utilities, 2018, recommends 100% compliance in drinking water quality parameters. Further, except for E. Coli content, the Guideline has provisions for acceptable boundaries of 95 – 98% average compliance in terms of other parameters such as turbidity levels. Apart from considering the water quality compliance in accordance to monitoring conducted by respective WSSAs over the past three years, this report has also presented the compliance to water quality according to tests that were monitored by EWURA during in FY 2018/19.

### (a) Water Quality Monitoring Conducted by Regional WSSAs

EWURA Water and Wastewater Quality Monitoring Guidelines for Utilities, 2014 requires all WSSAs to conduct water quality monitoring. During FY 2018/19 all Regional WSSAs conducted water quality tests and submitted the results to EWURA. The tested parameters in all WSSAs were E-Coli, Turbidity, Residual Chlorine and pH. The submitted test results were analyzed to ascertain compliance to TBS (TZS 789:2016-EAS12:2014). The overall compliance on the tested parameters was; 91% for the residual chlorine, 99% for pH, 96% for turbidity and 97% E-Coli. The overall water quality monitoring in terms of E-Coli, Turbidity, Residual Chlorine and pH over the past three years is presented in Table A2.6(a) of Appendix 2.

Comparing to the last FY 2017/18, the compliance level has remained the same in terms of residual chlorine and E. Coli; increased by 2% in terms of pH and dropped by 1% in terms of turbidity in FY 2018/19. The water quality compliance (in %) on the tested parameters on each WSSA were as shown on Figure 12.

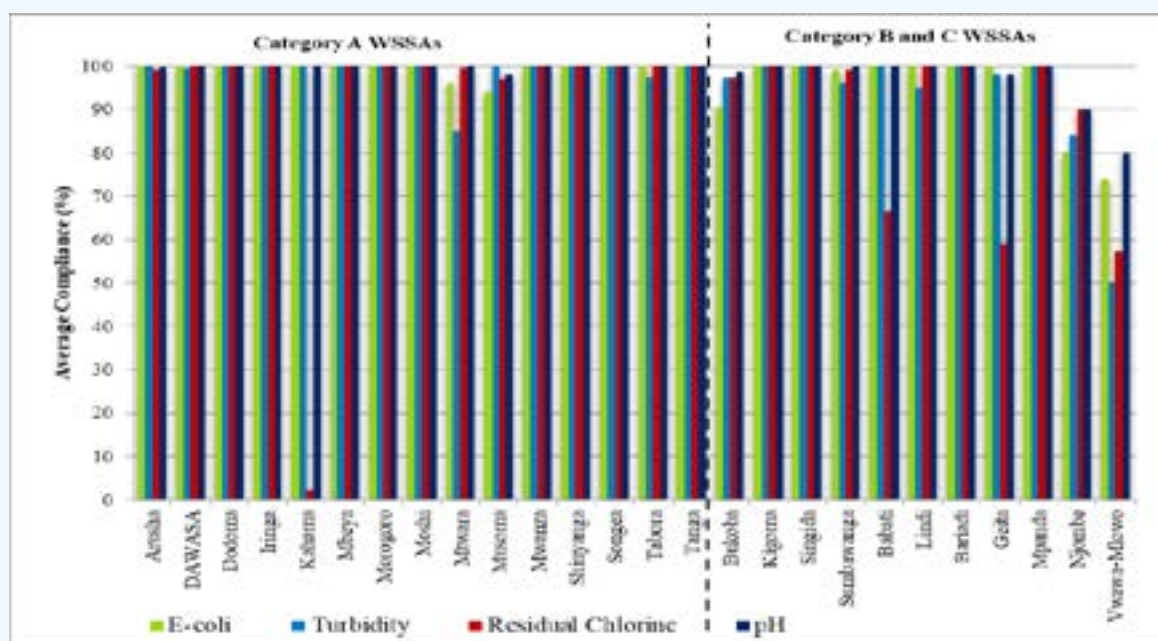


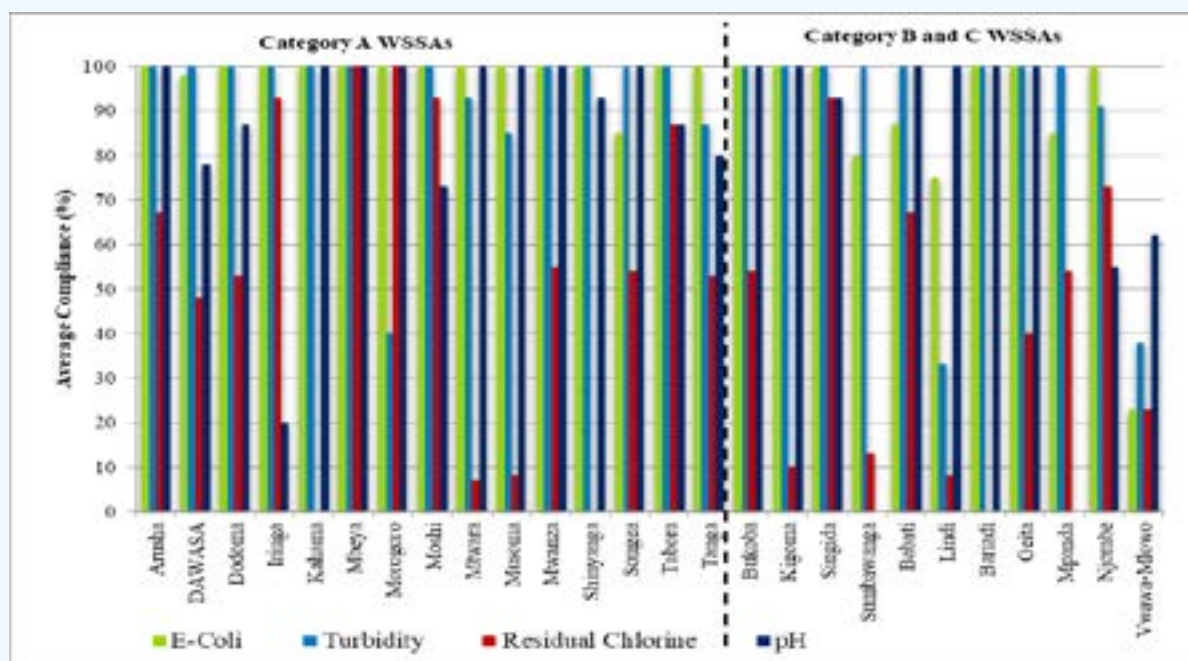
Figure 12: Water Quality Percentage Compliance reported by WSSAs

### (b) Water Quality Monitoring Conducted by EWURA

- In FY 2018/19, EWURA carried out water quality monitoring to all Regional WSSAs. A total number of 286 drinking water samples were collected and analyzed for pH, Turbidity, E-Coli and Residual Chlorine. The monitoring findings revealed that, the overall compliance on the tested parameters was 82% for pH, 91% for turbidity, 94% for E-Coli and 48% for the residual chlorine. A comparison of the water quality for the monitoring conducted by WSSAs and that conducted by EWURA during FY 2018/19 is presented in Table

A2.(6b) of Appendix 2.

- ii. The findings of the water quality monitoring revealed that there is continuous improvement in terms of bacteriological water quality with 4% increase in E. Coli compliance level as compared to FY 2017/18. However, there was a 3% drop in turbidity compliance level and 1% decrease in pH and residual chlorine when compared to FY 2017/18. The water quality compliance (%) on the tested parameters on each WSSA were as shown on Figure 13.



**Figure 13: Water Quality Percentage Compliance Reported by EWURA**

## 2.12 Wastewater Quality Monitoring

### (a) Wastewater Quality Monitoring Conducted by Regional WSSAs

- i. During FY 2018/19, nine (9) Regional WSSAs conducted wastewater quality monitoring by determining the effluent BOD and COD. The findings revealed that four(4) out of nine (9) Regional WSSAs namely; Songea, Mwanza, Mbeya and Moshi reported effluent BOD and COD complying with TBS (TZS 860:2006).
- ii. Iringa reported 50% BOD and COD, Morogoro reported 90% BOD and 100% COD of effluents complying with TBS (TZS 860:2006). In addition, DAWASA had 37% BOD and 11%COD of effluent compliance.
- iii. In FY 2018/19, the overall compliance as per WSSAs` test results were 66% and 62% for BOD and COD respectively. The compliance level is on uneven trend within three years as indicated in Table A2.7/ Appendix 2.

### (b) Wastewater Quality Monitoring Conducted by EWURA

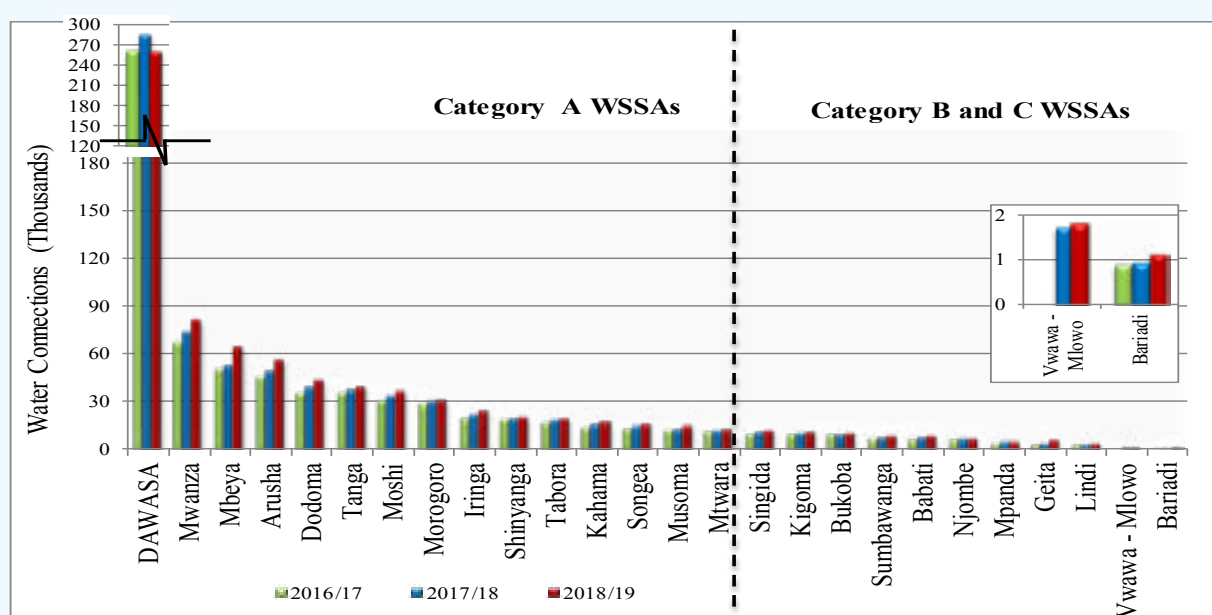
- i. EWURA carried out wastewater quality monitoring on nine (9) out 11 Regional WSSAs with sewerage treatment facilities. The wastewater samples were collected and analyzed for effluent BOD and COD compliance.
- ii. The analytical results revealed that four (4) Regional WSSAs namely; Iringa, Mwanza, Mbeya and Moshi out of nine (9) had effluent BOD complying with TBS (TZS 860:2006). Further, Iringa, Mbeya and Moshi had effluent COD complying with TBS (TZS 860:2006). In addition, DAWASA had 50% compliance in both BOD and COD. The overall compliance as per EWURA`s test results was 50% for BOD and 39% for COD.

## 3.0 BUSINESS AND COMMERCIAL OPERATIONS

The business operations of Regional WSSAs is analysed in terms of number of water and sewerage connections, water and sewerage service coverage, metering ratio, average service hours, staff productivity and complaints resolution.

### 3.1 Total Water connections

The total water connections increased from 722,320 connections in FY 2016/17 to 788,756 connections in FY 2017/18 equivalent to 8% increase and thereafter increased to 821,235 connections (4% increase) in FY 2018/19. Figure 14 shows water connections trend for Regional Water Utilities and the details of the connections trend are provided in Appendix 2-Table A2.8.



**Figure 14: Three-Year Trend for Total Water Connections**

Generally, compared to the water connections records for FY 2017/18 and FY 2018/19, all WSSAs increased their total water connections. The major reason for the increase was due to expansion of water network and water production that motivated the WSSAs to connect more customers.

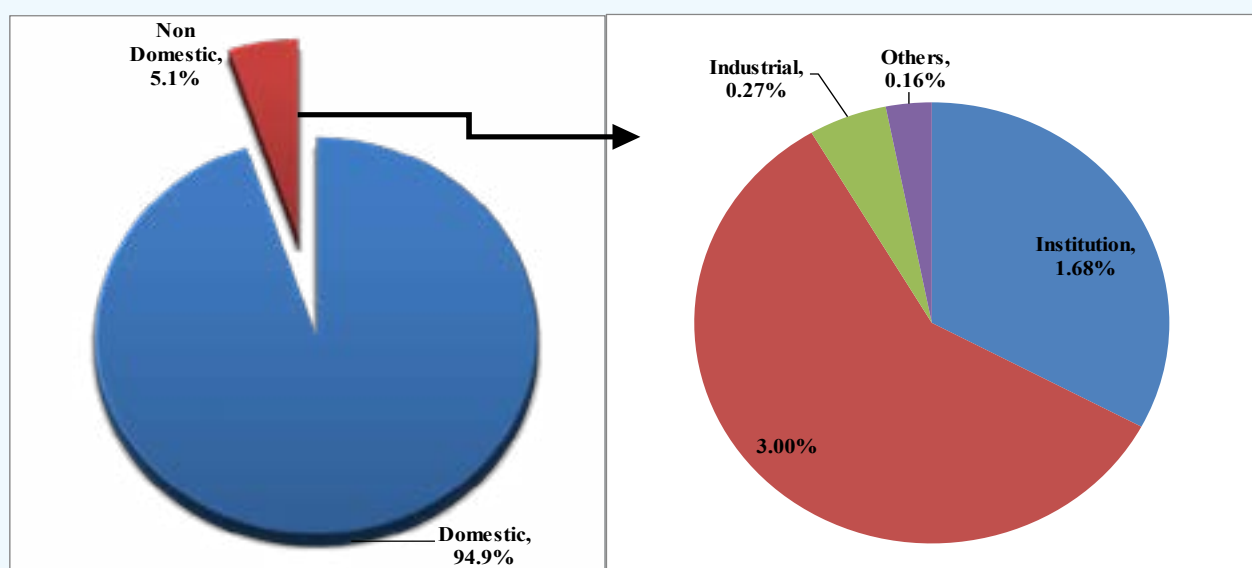
Big score of more than 20% increase was attained by Mbeya, Geita and Bariadi WSSAs. Table 12 presents the reasons for WSSAs that had significant increase in number of connections and reasons for that increase.

Conversely, DAWASA recorded a decrease in total water connection due to elimination of 24,217 connections that were used to be categorized as moribund connections.

**Table 12: WSSAs with Singificant Increase (20%) in Number of Water Connections**

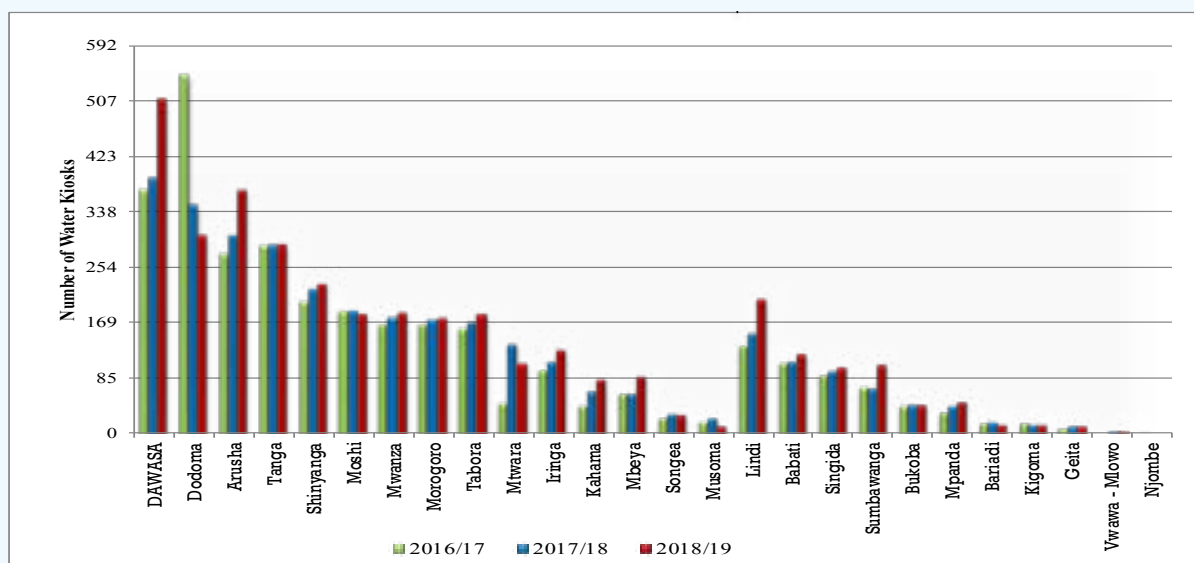
Name of WSSA	% Increase	Increase in Number of Connection	Remarks
Geita	36	1,577	Due to completion of two projects under government support through ; (i) Lake Victoria Water Supply and Sanitation project phase II added a total of 54 km and (ii) Extension of water network of 63.9km through financing from Ministry of Water.
Mbeya	23	12,300	Improved customer outreach program that motivated more customers to be connected.
Bariadi	21	196	Extension of DN50mm of pipeline by 0.5km at Somanda area.

Similar to previous years, domestic connections continued to make largest proportion of Regional WSSAs total water supply customers base as shown in Figure 15. The number of domestic connections increased from 683,627 in FY 2016/17 to 678,884 in FY 2017/18 and thereafter to 763,767 connections in FY 2018/19. Regional WSSAs have at least 86% of their total customers in the domestic category.


**Figure 15: Composition of Water Supply Connections in Regional WSSAs**

### 3.2 Water Kiosk Connections

Total number of kiosk increased from 3,179 in FY 2016/17 to 3,256 connections in FY 2017/18 and thereafter increased to 3,562 connections in FY 2018/19. The major reasons for the increase is due to construction of kiosks in underserved areas in order to enable the population in those areas to have access to water services while the WSSAs are making arrangements for network extensions. Figure 16 shows three years trend on the number of water kiosks while details of the same are in Appendix 2 Table A2.8.



**Figure 16: Water Kiosk Connections**

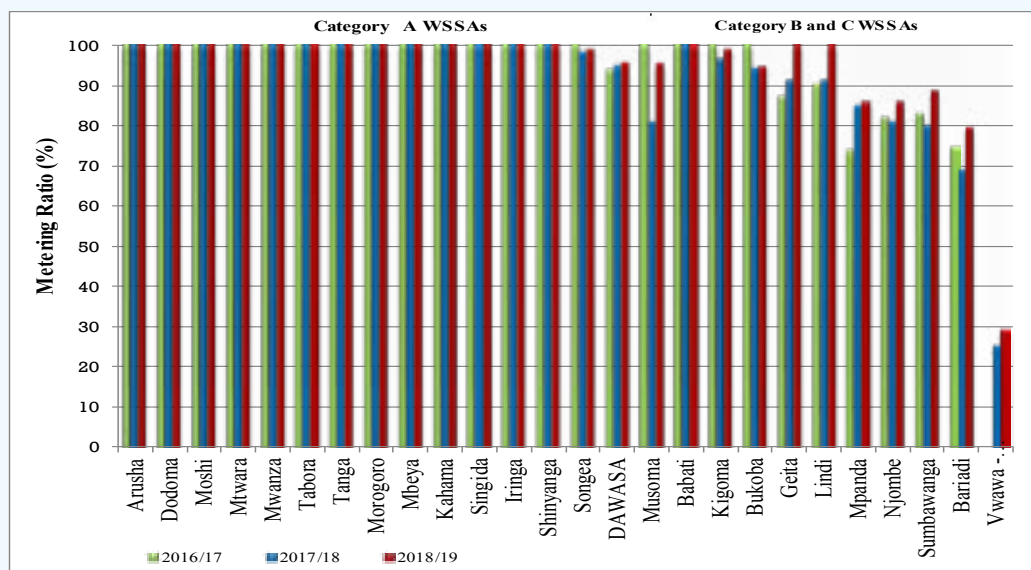
- During FY 2019/18, DAWASA had the highest number of kiosks followed by Arusha and Dodoma WSSAs.
- The WSSAs that reported highest increase in number of kiosk in FY 2018/19 compared to FY 2017/18 were DAWASA (121), Arusha (70) and Lindi (52). The clarification on the reasons for the increase in number of kiosk is provided in Table 13.
- Njombe WSSA is the only WSSA among the Regional WSSAs with no water kiosk.
- Dodoma WSSA reported the highest drop in number of water kiosk, 44 water kiosks decreased due to improvement of services in squatter areas and hence increase in house connections. In addition, Mtwara WSSA a decreased of 29 kiosk, followed by Musoma that had 11 kiosks decreased.

**Table 13: Regional WSSAs with Significant Increase in Number of Water Kiosks**

Utility Name	Increase in number of Water Kiosks	Clarifications
DAWASA	121	Registration of 112 community water kiosks that were formerly under respective Municipalities after re-establishment of DAWASA.
Arusha	70	Acquiring of Mangole community water supply scheme (Matevezi, Ngorobobu na Lemuguru) with 47 water kiosks. Other kiosks was additional kiosks that were constructed at Osunyai (3), Mlimani (3), Muriet (6), Ngarenaro (1), Olevolosi (7) and Lobvono (3).
Lindi	52	Extension of water supply network that was coupled with construction of water kiosks.

### 3.3 Metering Ratio

Over the past three years, the metering ratio for Regional WSSAs has improved from 97 in FY 2016/17 to 99.8% in FY 2018/19. Table A2.9 in Appendix 2, and Figure 17 gives more details of the three years' trend of metering ratio.



**Figure 17: Metering Ratio**

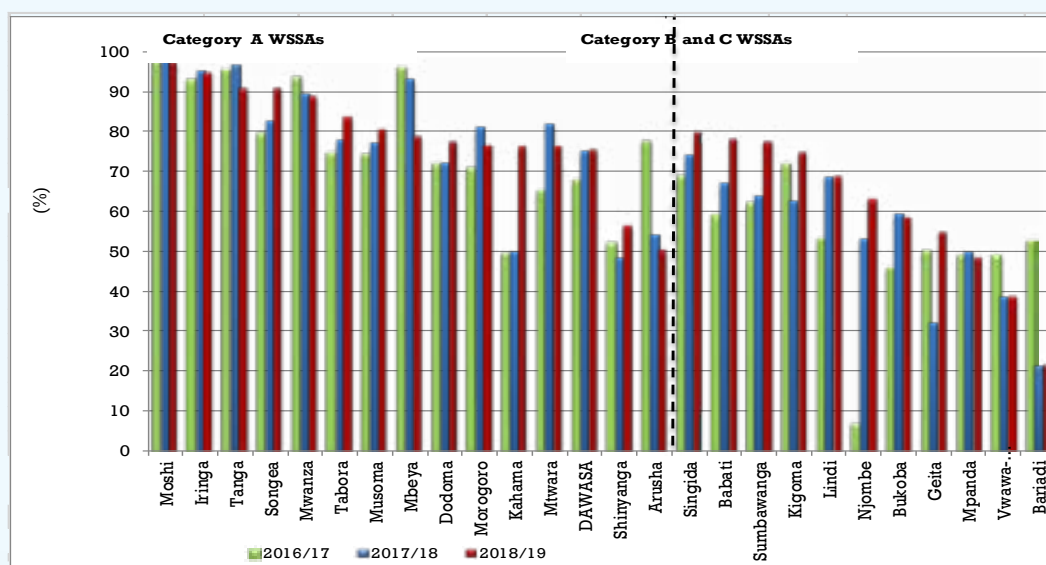
- Geita and Lindi WSSAs has attained 100% metering ratio in FY 2018/19.
- Musoma and Bariadi WSSAs have higher increase in metering ratio in FY 2018/19 as compared to the performance of FY 2017/18. The increase in metering ratio for Musoma WSSA was 15% and Bariadi was 11%.
- In FY 2018/19 no Regional WSSA that recored a decrease of metering ratio.

### 3.4 Water Service Coverage

Analysis of water service coverage is discussed in terms of population directly served and population living in area with water network. The analysis of the water service coverage considered the projected population from the 2012 National Bureau of Statistics (NBS) census.

#### 3.4.1 Proportion of Population Directly Served with Water

The proportion of population directly served with water in Regional Utilities decreased from 71.0% reported in FY 2016/17 to 69% in FY 2018/19. Figure 18 and Appendix 2: Table A2.10 provides details for the proportion of population served with water over the past three years.



**Figure 18: Proportion of population directly served with water**

- i. Moshi WSSAs recorded highest water service coverage in terms of populations directly served (98%) followed by Iringa (95%), Tanga (91%) and Songea (91%) coverage.
- ii. Significant increase in coverage in terms of population directly served were Kahama (27%), Geita (23.4%) and Sumbawanga (14.4%).
- iii. The lowest performers in the water service coverage in terms of population directly served with water were Bariadi, Vwawa-Mlowo and Mpanda WSSAs with 22%, 39% and 49% respectively.
- iv. In FY 2018/19, Tanga WSSA showed some drop in the population directly served with water due to the reason that City boundary has widened to include other areas of Chongoleani, Kirare and parts of Kiomoni Wards.

### 3.4.2 Proportion of Population Living in Area with Water Network

The proportion of population living in area with water supply network improved from 79% in FY 2016/17 to 85% in FY 2018/19. Generally, the improvement was due to completion of water supply projects in various WSSAs including extension of water supply network to unserved areas. The details on the performance in proportion of population living in area with water network are provided in Appendix 2 Table A2.10 and Figure 19.

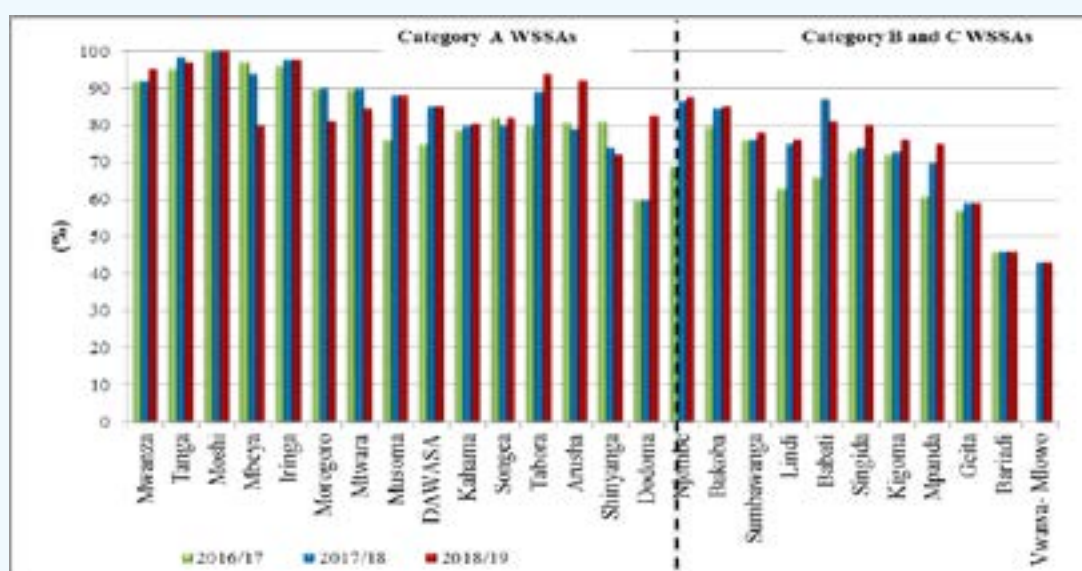


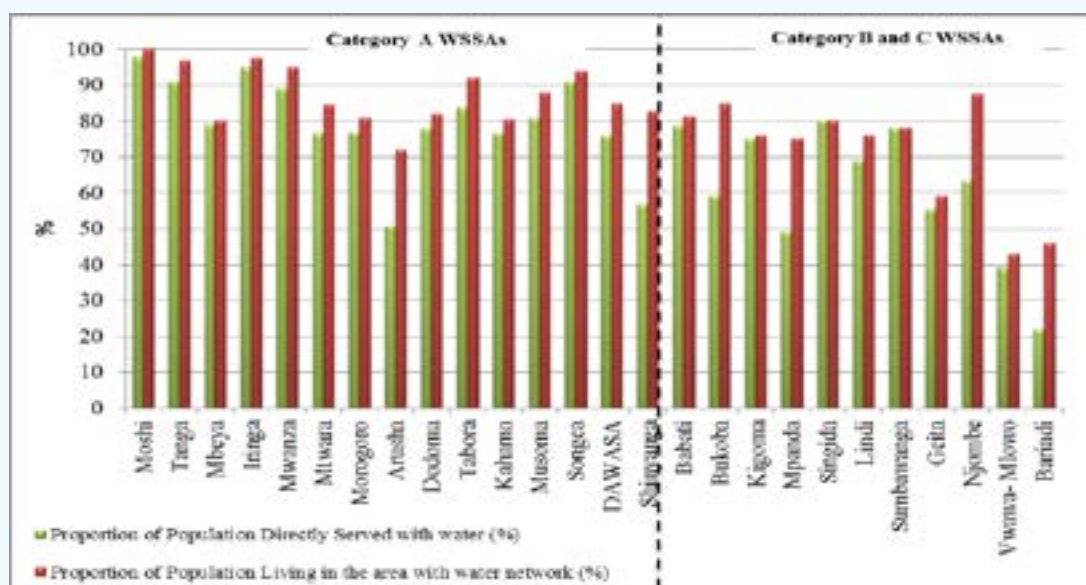
Figure 19: Proportion of population living in area with water network

- i. The highest water network coverage in FY 2018/19 was reported by Moshi, Iringa Tanga and Mwanza. Their service coverage in terms of population living in area with water network was 100% for Moshi WSSA, 98% for Iringa, Tanga , 97% and 95% for Mwanza.
- ii. Major improvement in proportion of populaton living in area with water network was attained by Arusha WSSA with 12% increase, due to extension of water network by 52km to unserved areas in FY 2018/19.
- iii. Vwawa-Mlowo, Bariadi and Geita were the least performers in terms of proportion of population living in area with water supply network.
- iv. Mbeya WSSA showed significant drop in terms of proportion of populaton living in area with water network by 13% due to the inclusion of Mbalizi to Mbeya service area, the area which have low water service coverage.

### 3.4.3 Comparison of Indicators for Water Service Coverage

The comparison of two indicators constituting service coverage that is proportion of population directly

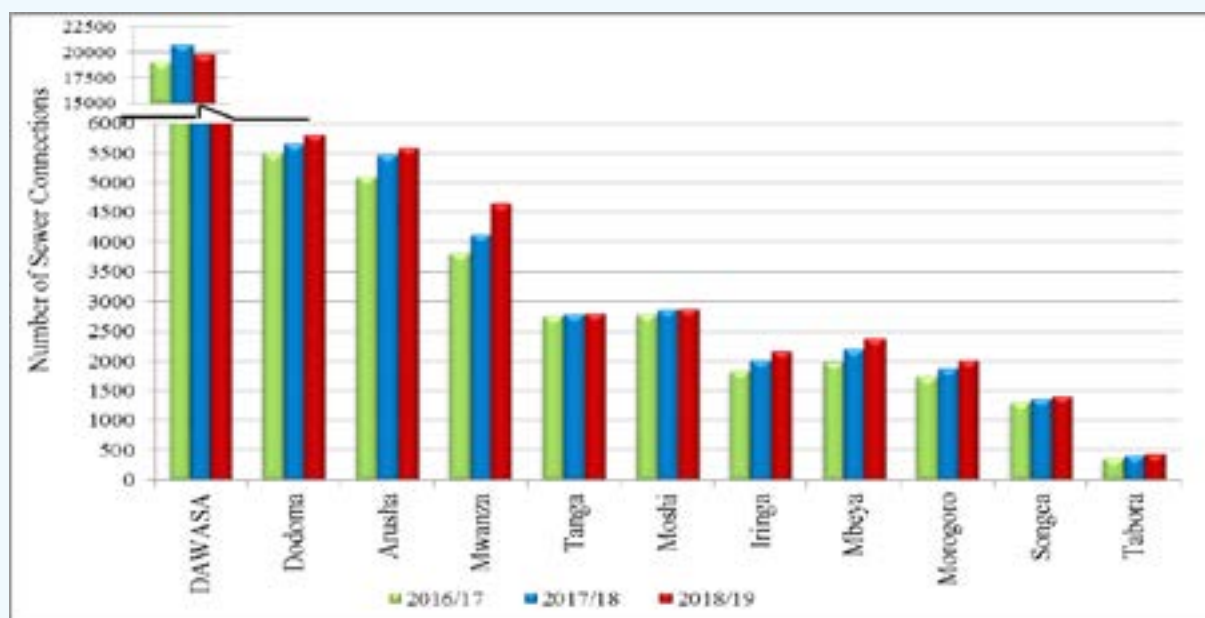
served with water and proportion of population living in areas with water network shows that the network has not been fully utilized in Arusha, Bukoba, Mpanda, Bariadi and Njombe WSSAs. Presentation of the two indicators is provided in Figure 20.



**Figure 20: Comparison of proportions of Population living in Area with Water Network and Population Served with Water**

### 3.5 Sewerage Connections

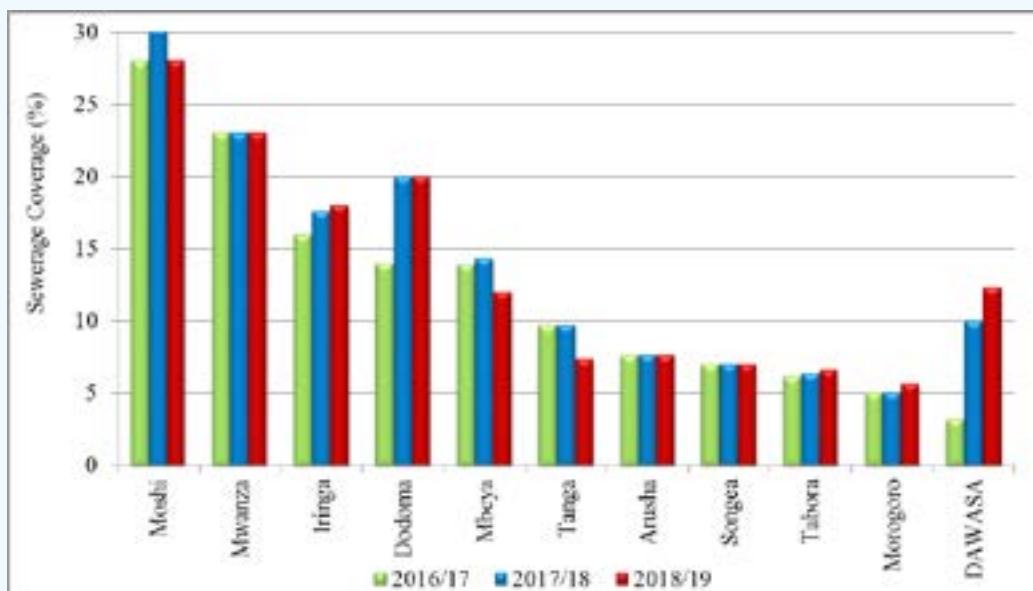
The total number of sewerage connections showed an increasing trend from 46,432 in FY 2016/17 to 49,663 in FY 2017/18 and 50,044 in FY 2018/19. Detailed trends of sewerage connections for the 11 WSSAs with sewerage services are presented in Appendix 2: Table A2.11 and illustrated in Figure 21.



**Figure 21: Sewerage connections**

Mwanza WSSA attained the highest increase in number of sewerage connection in FY 2018/19 compared to FY 2017/18 by 12% increase. Sewerage Coverage

Overall sewerage coverage among Regional WSSAs improved from 7.5% to 12.1% and thereafter to 13.4% for 2016/17, 2017/18 and 2018/19 respectively. However, the overall performance indicates that the sewerage coverage among the Regional WSSAs is still unsatisfactory as the maximum sewerage coverage is 28% reported by Moshi WSSA. Regardless of having the highest sewerage coverage, Moshi WSSA reported a drop in coverage from 31% to 28% due to difference in connection rate compared with population growth rate. The overall sewerage coverage is shown on Figure 22.

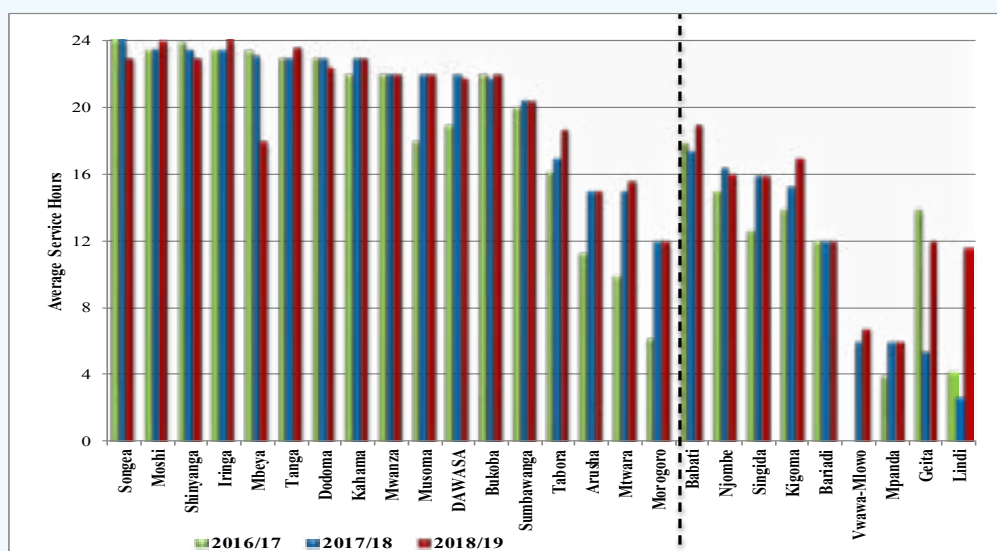


**Figure 22: Proportion of population connected with sewerage services**

Over the past three years, Moshi WSSA has continued to be the Regional WSSA with the highest sewerage coverage and Morogoro WSSA continued to be the least performer among Regional WSSAs with sewerage network.

### 3.6 Average Hours of Service

Overall average hours of service for Regional WSSAs has improved from 17 hours in FY 2016/17 to 18 hours in FY 2018/19. Figure 23 and Appendix 2 - Table A2.12 give a detailed overview on average service hours.



**Figure 23: The average service hours**

The WSSAs of Songea, Iringa, Kahama, Mwanza, Moshi, Shinyanga, Sumbawanga, Tanga, Dodoma, Musoma, Bukoba and DAWASA reported availability of water services to their customers for at least 20 hours per day. The least performers in service hours were Mpanda (6 hours) and Vwawa - Mlowo (7 hours). Mbeya WSSA has recorded decrease of hours of service from 23 hours in FY 2016/17 and FY 2017/18 to five (5) hours in FY 2018/19, due to inclusion of Mbalizi Township which has become part of Mbeya WSSA supply area. Mbalizi had average service hours of 7.

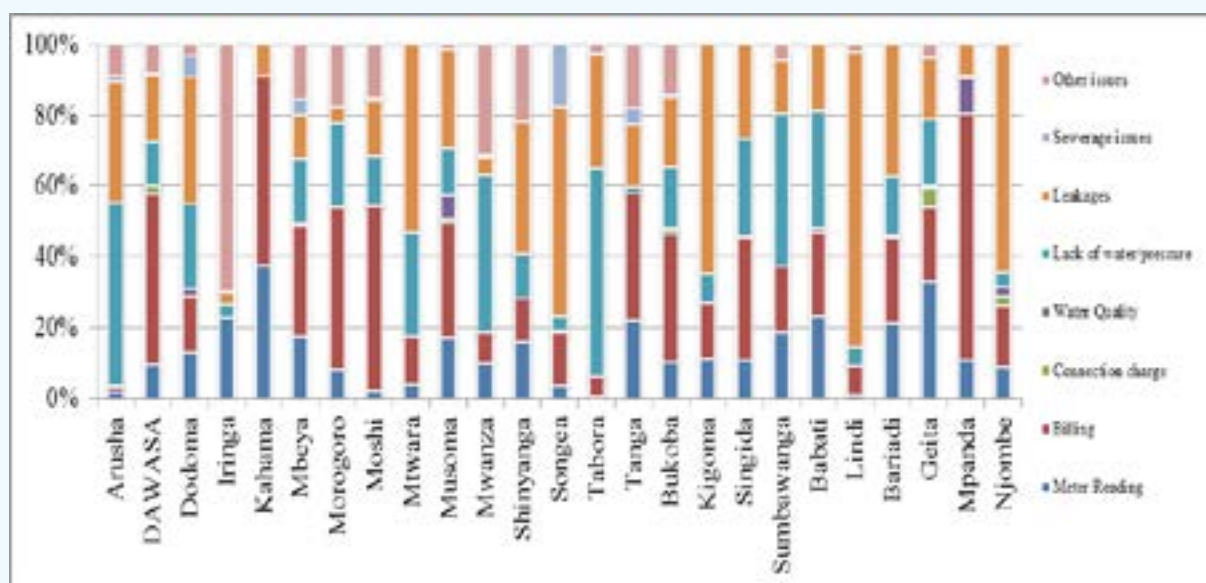
Table 14 presents utilities with significant increase in service hours.

**Table 14: Regional WSSAs with Significant Increase in Service Hours**

Name of WSSA	Service Hours Increase	Remarks
Lindi	8.9	Due to increase in water production after completion of Ngapa water project
Geita	6.5	Replacement of two submersible pumps at the water abstraction point that enabled availability more water for supply.

### 3.7 Complaints and Complaints Resolution

Analysis of the complaints handling was based on eight groups of complaints which are (i) meter reading, (ii) billing, (iii) connection charge, (iv) water quality, (v) Lack of water/water pressure (vi) sewerage issues (vii) Leakage; and (viii) complaints on other issues than those listed in (i) to (viii). A comparison of the composition of the total complaints received by each Regional WSSAs is shown in Figure 24.



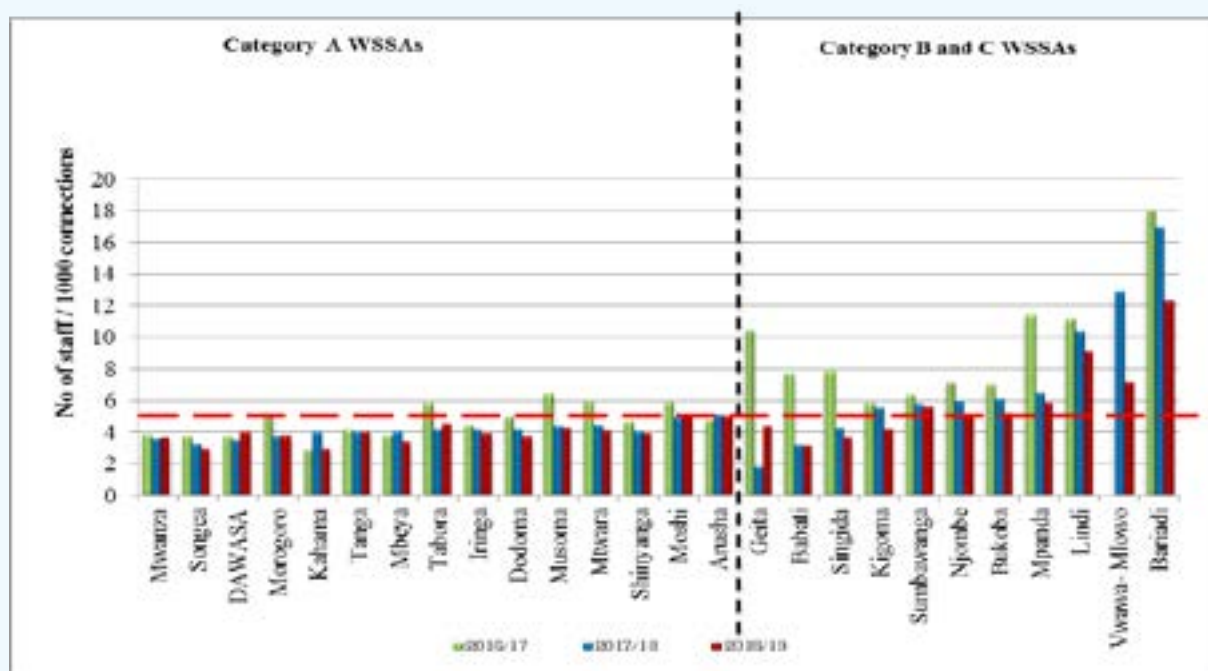
**Figure 24: Comparison of the composition of complaints received by Regional WSSAs**

During FY 2018/19, Regional WSSAs received a total of 163,728 complaints with the ones on billing making the highest proportion (35%) of complaints received followed by complaints on leakage (21%) and lack of water or low pressure (18%).

### 3.8 Staff Productivity

Generally there has been a continuous improvement in the number of staff per 1000 water and sewerage from 5 staff per 1000 connection in FY 2016/17 to 4 staff per 1000 connections in FY 2017/18 and FY 2018/19.

Details of the total number of staff and staff per 1000 water and sewerage connections are presented in Appendix 2: Table A2.19 and illustrated in Figure 25.



**Figure 25: Number of staff per 1000 water and sewerage connections**

With exception of Bariadi, Lindi, Vwawa-Mlowo, Sumbawanga and Mpanda WSSAs, the remaining Regional WSSAs attained the service level benchmark of 5 or less for staff per 1000 water and sewerage connections in FY 2018/19.

## 4.0 FINANCIAL OPERATIONS

Financial operations include revenue generation, expenditure control, cost structure and recovery. The revenue generated from water and sanitation services is the core and most stable sources of income for WSSAs in order to meet operation and maintenance (O&M) costs and contributing to infrastructure investment costs. Thus, the sustainability of a water and sanitation authority depends mainly on its ability to correctly bill and collect the amount billed to its customers. On the other hand, expenditure control is the prudent way of using limited financial resources to attain the intended objectives.

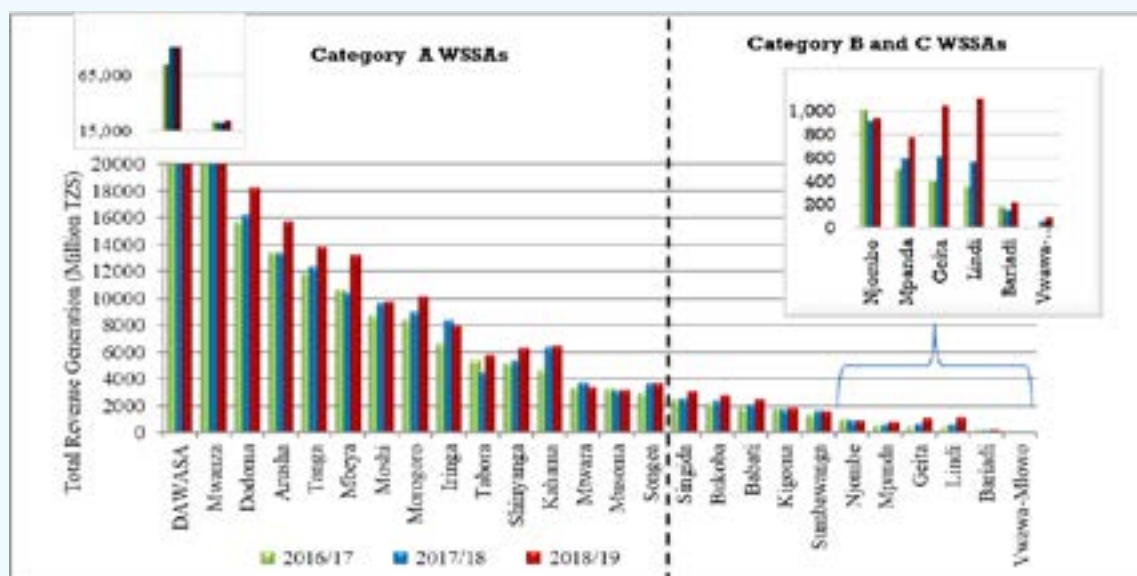
### 4.1 Revenue Generation

Generally, Regional WSSAs recorded an improvement in overall revenue generation, which has increased by 41% from TZS 209.51billion in FY 2016/17 to TZS 294.72billion in FY 2018/19. Further, 80% of the generated revenue was from water billing, 6% from sanitation services and 14% from other operation activities. Water billing for Regional WSSAs rose by 36% from TZS 172.3 billion to TZS 234.0 billion, while Sanitation billing rose by 1% from TZS 18.1 billion to TZS 18.3 billion, and other operating revenues rose by 122% from TZS 19.1 billion to TZS 42.4 billion, respectively. Table 15 shows three years trend of revenue generation from water sales, sanitation and other operating activities.

**Table 15: Total Revenue Generation for Regional WSSAs (In Million TZS)**

Category	Description	2016/17	2017/18	2018/19
Category A	Water Billing	161,885	191,261	220,834
	Sewerage Billing	18,100	14,889	18,212
	Other Operating Revenues	17,353	24,420	39,832
	<b>Total Category A</b>	<b>197,338</b>	<b>230,570</b>	<b>278,878</b>
Category B & C	Water Billing	10,384	10,447	13,179
	Sewerage Billing	-	20	73
	Other Operating Revenues	1,790	2,655	2,591
	<b>Total Category B &amp; C</b>	<b>12,173</b>	<b>13,122</b>	<b>15,843</b>
Total	Water Billing	172,268	201,708	234,013
	Sewerage Billing	18,100	14,909	18,285
	Other Operating Revenues	19,143	27,075	42,423
	<b>GRAND TOTAL</b>	<b>209,511</b>	<b>243,692</b>	<b>294,721</b>

The increased other operating revenues is attributed to overall increase in the water production, increase in customer base as well as improvement of other services such as metering, new connections and reconnections. Figure 1 shows three years' trend of total revenue generation for Regional WSSAs. Figure 26 shows trend of total revenue generations.

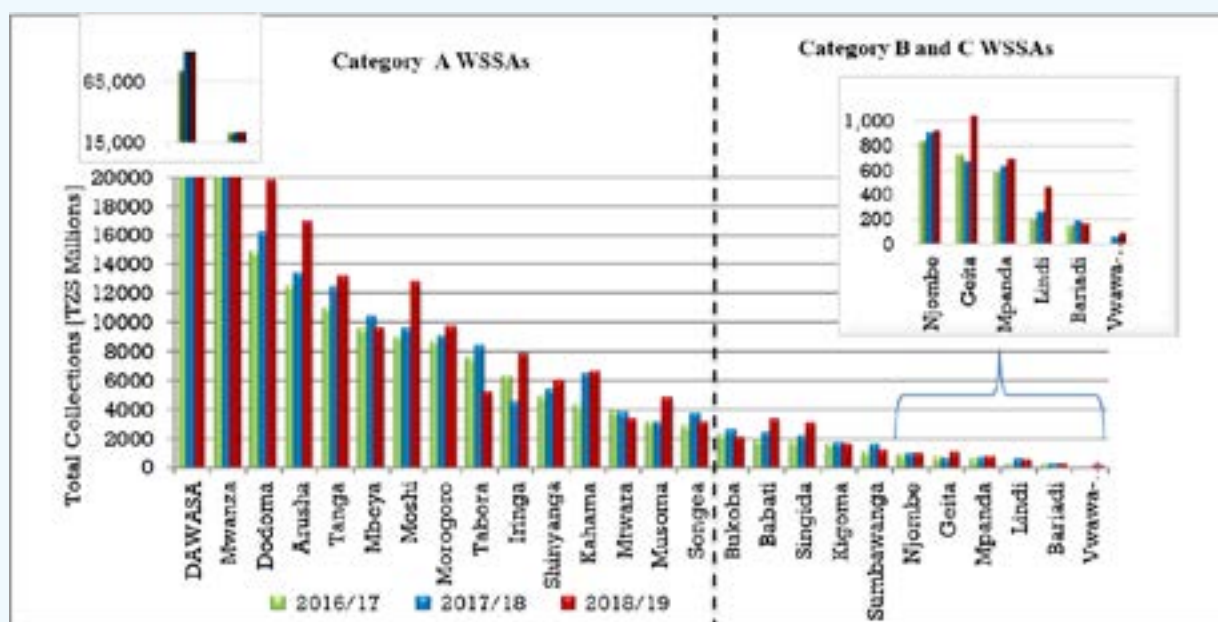


**Figure 26: Trend of Total Revenue generations**

DAWASA continued to register the highest revenue generation in FY 2018/19, generating TZS 136.77 billion while Vwawa - Mlowo WSSA generated least revenue of TZS 95.6 million. Appendix 2- Table A2.14 shows three years billing trend and billing composition for regional WSSAs.

#### 4.1.1 Total Revenue Collections Trend

In FY 2018/19, total revenue collections increased by 42% to TZS 292.0billion from TZS 205.7billion registered in 2016/17. Figure 27 presents WSSAs' performance in revenue collection from FY 2016/17 to FY 2018/19. The overall revenue collection for regional WSSAs is shown in Figure 26 and detailed in Table A2.18 of Appendix 2.



**Figure 27: Total Revenue Collections**

DAWASA continued to register the highest revenue collection in FY 2018/19 collecting TZS 135.4 billion with Vwawa - Mlowo WSSA being the least by collecting TZS 95.6 million. Despite the general increase, in FY 2018/19; Mwanza, Mbeya, Iringa, Kahama, Tabora, Mtwara, Songea, Bukoba, Sumbawanga and Bariadi

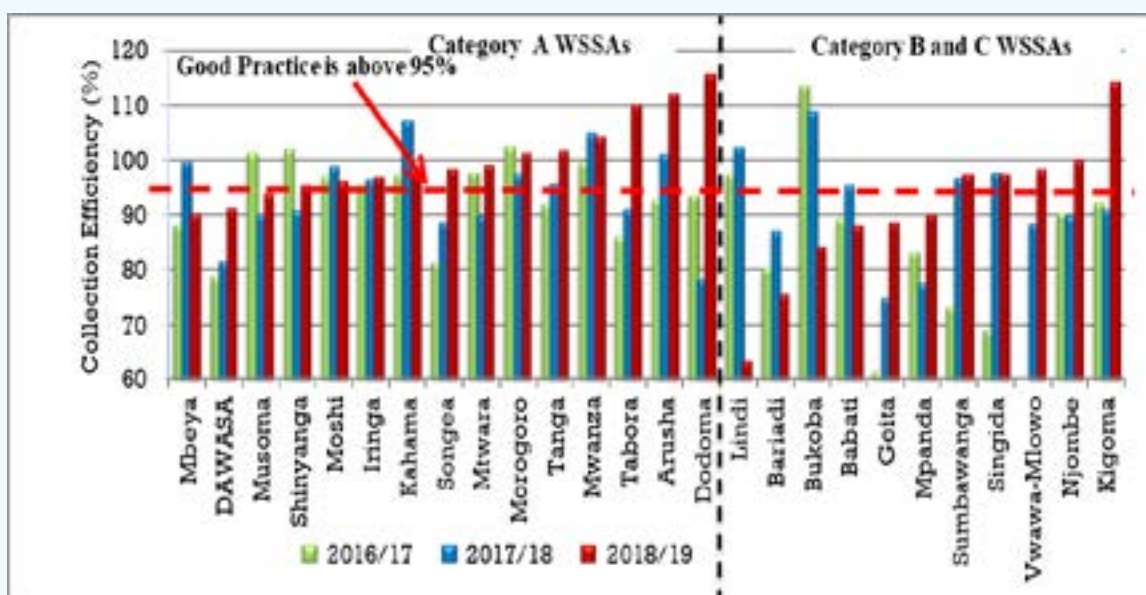
WSSAs' revenue collections declined compared to FY 2017/18. It has to be noted that the revenue generation depends on, among other things, on the customer base where DAWASA has high number of customers (261,294 customers) and Vwawa-Mlowo is the second ranked utility in terms of regional WSSAs with few customers (1,814 customers).

#### 4.1.2 Billing and Revenue Collection Performance

The analysis on three indicators, namely collection efficiency, accounts receivable, and Overall Efficiency Indicator (OEI) explain the billing and revenue collection performance.

#### 4.1.3 Collection Efficiency

The ability of WSSAs to collect the billed amount from water supply and sanitation services improved by 5% from an average of 91.2% in FY 2016/17 to 96.2% in FY 2018/19 achieved in FY 2017/18. Figure 28 presents WSSAs collection efficiencies from FY 2016/17 to FY 2018/19.



**Figure 28: Collection Efficiency**

- The billing software of most utilities cannot separate current year collection and collection from arrears resulting in high collection efficiencies and collection efficiencies above 100%. Out of 26, only seven WSSAs had software capable of separating arrears from current bill collection using their billing software. These were DAWASA, Babati, Sumbawanga, Songea, Njombe, Morogoro and Shinyanga WSSAs.
- Dodoma, Kigoma, Arusha, Tabora and Mwanza WSSAs recorded collection efficiencies of more than 103.9% with Lindi achieving the least collection efficiency of 63.6%. Table A2. 13 of Appendix 2 shows three years trend on Revenue Collection Efficiency, Accounts Receivables and Overall Efficiency Indicator from FY 2016/17 to FY 2018/19.

#### 4.1.4 Accounts Receivable Ratio

On average, accounts receivable's performance improved from 3.8 months in 2016/17 to 3.3 in FY 2018/19. Mbeya, Geita, Babati, Iringa and Mpanda WSSAs were the best performers in FY 2018/19 after recording accounts receivable ratio of less than two months with Kigoma WSSA being the least performer with an accounts receivable ratio of 10.9 months. Figure 29 shows account receivable ratios.

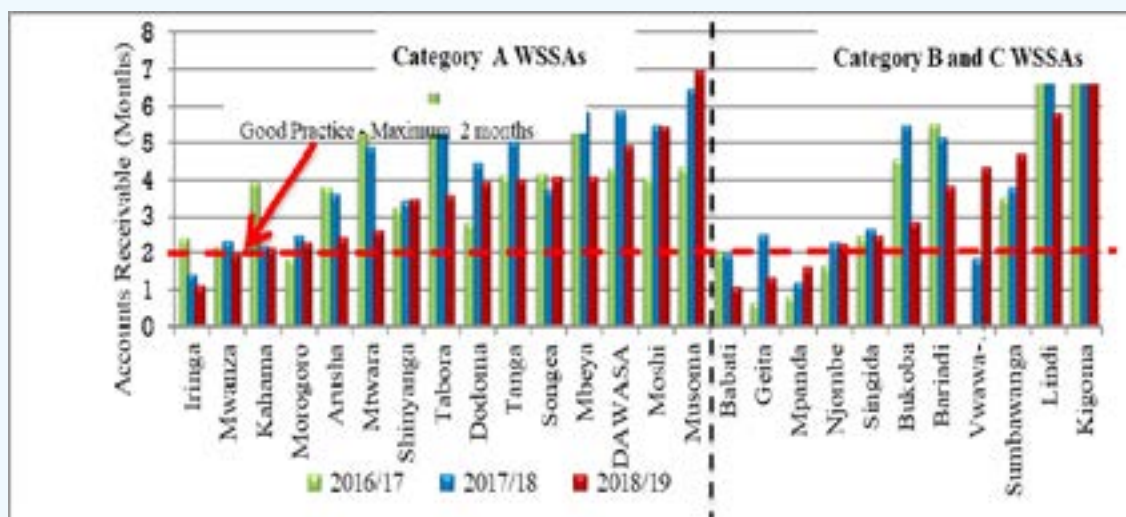


Figure 29: Accounts Receivable

#### 4.1.5 Overall Efficiency Indicator (OEI)

On average, in FY 2018/19, the OEI improved to 68.0% compared to 57.7% registered in FY 2016/17. During FY 2018/19, the OEI ranged between 40.0% and 99.6%.

Arusha WSSA (99.6%), Singida WSSA (96.9%), Moshi WSSA (95.7%), Kahama WSSA (85.1%) and Shinyanga WSSA (82.5%) were overall efficient utilities in FY 2018/19. Musoma WSSA was the least performer with an overall efficiency indicator of 37.5% that was attributable by very high NRW (59.98%). Despite the good performance recorded by Kahama WSSAs (85.1%) in FY 2018/19 compared to other WSSAs, the utility could not achieve the performance levels of 89.3% they recorded in FY 2017/18.

There was an improvement for Arusha, Singida, Moshi, Shinyanga, Songea, Bariadi, Mtwara, Dodoma, Mpanda, Tanga, Kigoma, Iringa, Njombe, Geita, Morogoro, Vwawa-Mlowo, Tabora, Babati, DAWASA, Bukoba and Musoma WSSAs compared to the achievement in FY 2017/18. Figure 30 illustrates the overall efficiency indicator.

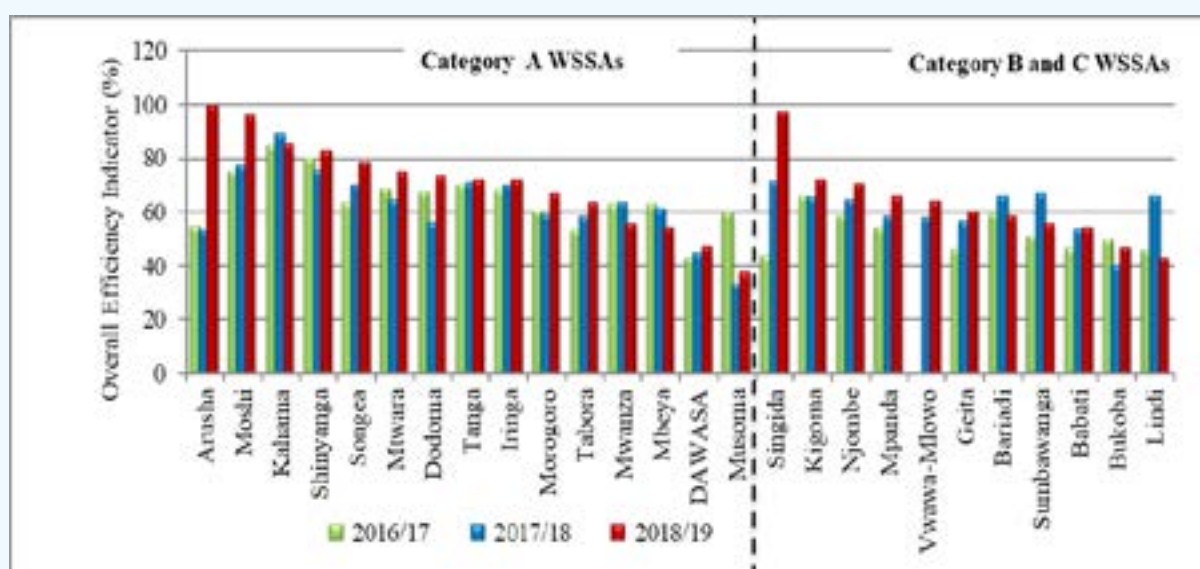
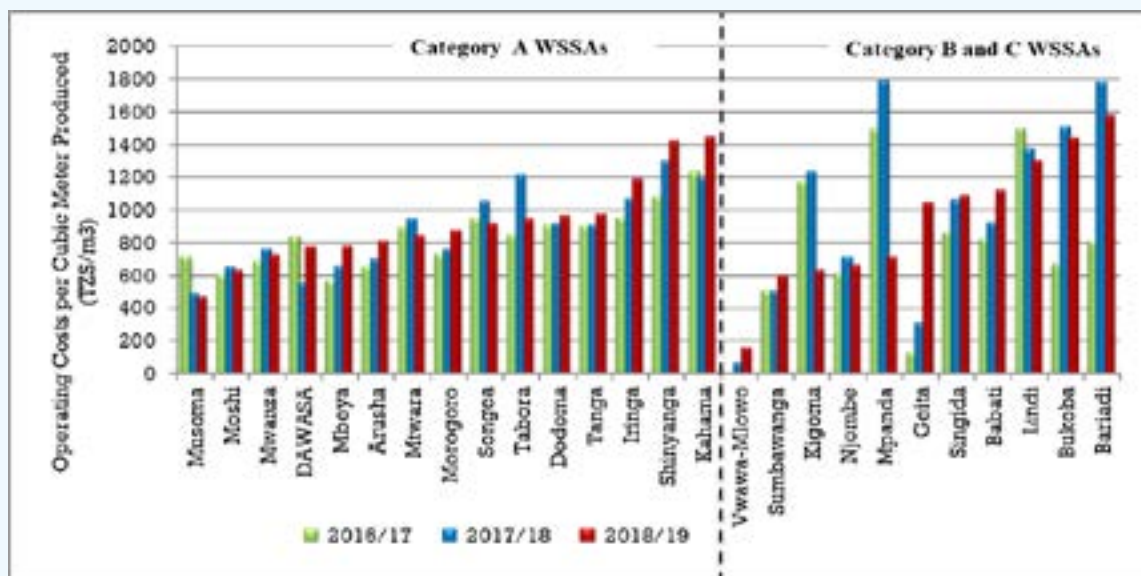


Figure 30: Overall Efficiency Indicator

## 4.2 Expenditure Control

### 4.2.1 Total Costs per Unit of Water Produced

The total costs per unit of water produced considers total operating costs exclusive of depreciation. In FY 2018/19, on average, the total costs per unit of water produced increased by TZS 54.48 per m<sup>3</sup> to TZS 901.7 per m<sup>3</sup> from TZS 847.2 per m<sup>3</sup> reported in FY 2016/17. Given, an average tariff of TZS 1,367.9 per m<sup>3</sup> in use during 2018/19, this implies that most of the regional WSSAs were able to cover at least O&M costs excluding depreciation. Figure 31 shows total costs per unit of water produced for regional WSSAs.



**Figure 31: Total Costs per unit of water produced for Regional WSSAs**

In FY 2018/19 the WSSAs which recorded lowest costs per unit of water production were Vwawa-Mlowo (TZS 158.2), Musoma (TZS 468.3), Sumbawanga (TZS 601.0), Moshi (TZS 633.6) and Kigoma (TZS 636.5). Further, the top five WSSAs in terms of higher costs per unit of water production were Bariadi (TZS 1,572.5), Kahama (TZS 1,447.5), Bukoba (TZS 1,438.1), Shinyanga (TZS 1,421.2) and Lindi (TZS 1,302.4).

Total costs per unit of water produced increased during FY 2018/19 compared to FY 2017/18 for DAWASA, Dodoma, Arusha, Tanga, Morogoro, Mbeya, Iringa, Kahama, Shinyanga, Babati, Singida, Sumbawanga, Geita and Vwawa-Mlowo WSSAs. In contrast, total costs per unit of water produced decreased during FY 2018/19 for Mwanza Moshi Tabora Musoma Mtwara Songea Bukoba Kigoma Njombe Mpanda Lindi and Bariadi WSSAs compared to FY 2017/18 performance.

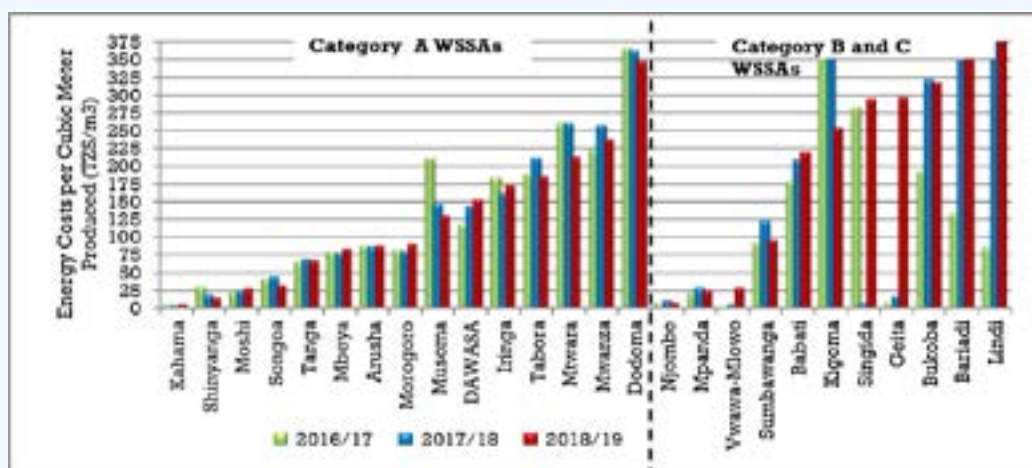
There are several factors attributed to unit cost per water produced such as quality of water, pumping hours, coverage area of service etc. hence the lower the unit cost per water produced does not necessarily imply the better the performance of the utility. Table A.15- Appendix 2 shows Total O&M, Production & Maintenance and Administration costs trend from FY 2016/17 to FY 2018/19.

### 4.2.2 Production Costs

The major drivers of water production cost is generally energy and chemicals. Energy costs per unit of water produced considers both electricity costs for production and distribution.

### Energy Costs Per Unit of Water Produced

The overall average energy costs for all utilities increased by TZS 20.7 per m<sup>3</sup> from TZS 142.8 in FY 2016/17 to TZS 163.5 per m<sup>3</sup> of water produced recorded in FY 2018/19. However, during the period under review, the energy costs for utilities ranged from TZS 5.4 to TZS 438.1 per m<sup>3</sup>. Figure 32 shows energy costs per unit of water produced for regional WSSAs.

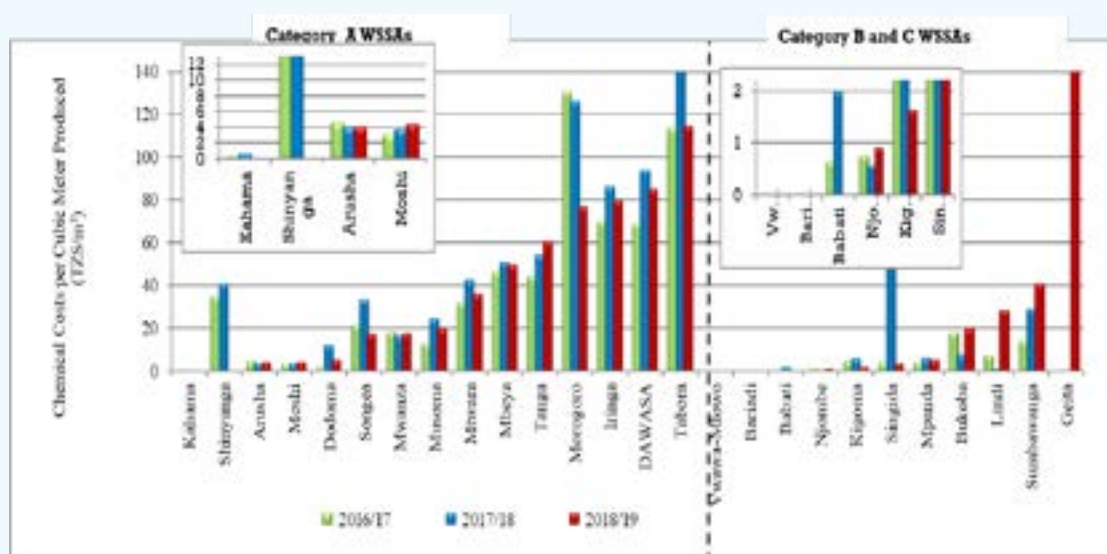


**Figure 32: Energy Costs per unit of water produced for Regional WSSAs**

Except for Lindi, Bariadi, Dodoma, Bukoba, Geita, Singida, Kigoma, Mwanza, Babati, Mtwara, Tabora, Iringa, DAWASA and Musoma WSSAs, the energy cost for most utilities was less than TZS 100 per m<sup>3</sup>. In FY 2018/19, Moshi, Mpanda, Shinyanga, Njombe and Kahama WSSAs were the least energy costs utilities while Lindi, Bariadi, Dodoma, Bukoba and Geita WSSAs recording higher energy costs per unit of water produced. Energy costs per unit of water production for Bariadi, Geita, Babati, DAWASA as well as Moshi WSSAs have been high and ever increasing for the past three years.

### Chemical Costs per Unit of Water Produced

In FY 2018/19, on average, chemical costs for utilities increased slightly to TZS 34.2 per m<sup>3</sup> from TZS 26.2 per m<sup>3</sup> recorded in FY 2016/17. Figure 33 shows chemical costs per cubic meter for regional utilities WSSAs.



**Figure 33: Chemical Costs per Cubic Meter for Regional Utilities WSSAs**

In FY 2018/19, Geita, Tabora, DAWASA, Iringa, and Morogoro WSSAs registered higher chemical costs per m<sup>3</sup> while Songea, Dodoma, Mpanda, Moshi, Arusha, Singida, Kigoma, Njombe, Kahama, Shinyanga, Vwawa-Mlowo, Bariadi and Babati WSSAs registered lower chemical costs per m<sup>3</sup>. Chemical costs per m<sup>3</sup> for Tanga, Sumbawanga, and Moshi WSSAs have been high and ever increasing since FY 2016/17.

The main reasons for high chemical costs include presence of surface water sources in the form of dams for Morogoro and Tabora WSSAs. As for Iringa WSSA, high turbidity of raw water on the Ruaha river due to increased human activities along little Ruaha river required large amount of chemicals for treatment by the Iringa WSSA.

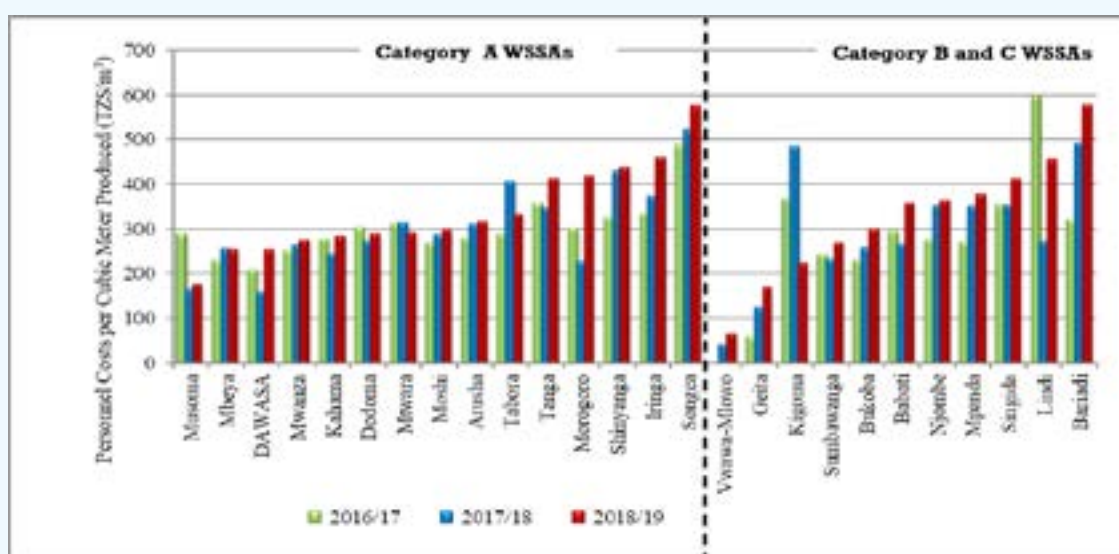
### 4.2.3 Personnel Costs

The impact of personnel costs on overall performance of a utility is determined in comparison to the total water production or revenue collections. Normally the lower the ratio of personnel costs to water production or revenue collection, the better the performance.

#### **Personnel Costs per Unit of Water Produced**

On average, in FY 2018/19, personnel costs for utilities ranged between TZS 251.9 and TZS 221.6 per m<sup>3</sup> of water produced. On average, in FY 2018/19, personnel costs per unit of water produced for all utilities increased to TZS 330.2 per m<sup>3</sup> from TZS 298.8 per m<sup>3</sup> recorded in FY 2016/17.

In general, Category B and C WSSAs tend to have lower personnel costs per unit of water produced than Category A WSSAs. During FY 2018/19, they recorded an average of TZS 322.4 per m<sup>3</sup> compared to TZS 335.9 per m<sup>3</sup> recorded by Category A WSSAs. Figure 34 shows personnel costs per cubic meter of water produced.



**Figure 34: Personnel Costs per cubic meter of water produced**

In FY 2018/19, Bariadi, Songea, Iringa, Lindi and Shinyanga WSSAs registered higher personnel costs per m<sup>3</sup> while Mbeya, Kigoma, Musoma, Geita and Vwawa-Mlowo WSSAs registered lower personnel costs per m<sup>3</sup>. Despite the fact that high personnel costs per cubic meter produced is a normal situation under Category B and C WSSAs, Vwawa-Mlowo WSSAs recorded the least personnel costs per cubic meter produced at TZS 63.48 per m<sup>3</sup>.

### Personnel Costs as a Percentage of Revenue Collections

Personnel costs as percentage of revenue collections shows the proportion of total revenue collections spent to cover personnel costs. It considers revenue collections from internal sources exclusive of arrears. Generally, the lower the percentage the better. During FY 2018/19, personnel costs as a percentage of revenue collections ranged between 22.4% and 55.0%. This represents an average of 39.0% in FY 2018/19 that is a slight improvement compared to 40.0% registered in FY 2016/17. Figure 35 shows personnel costs as a percentage of revenue collections.

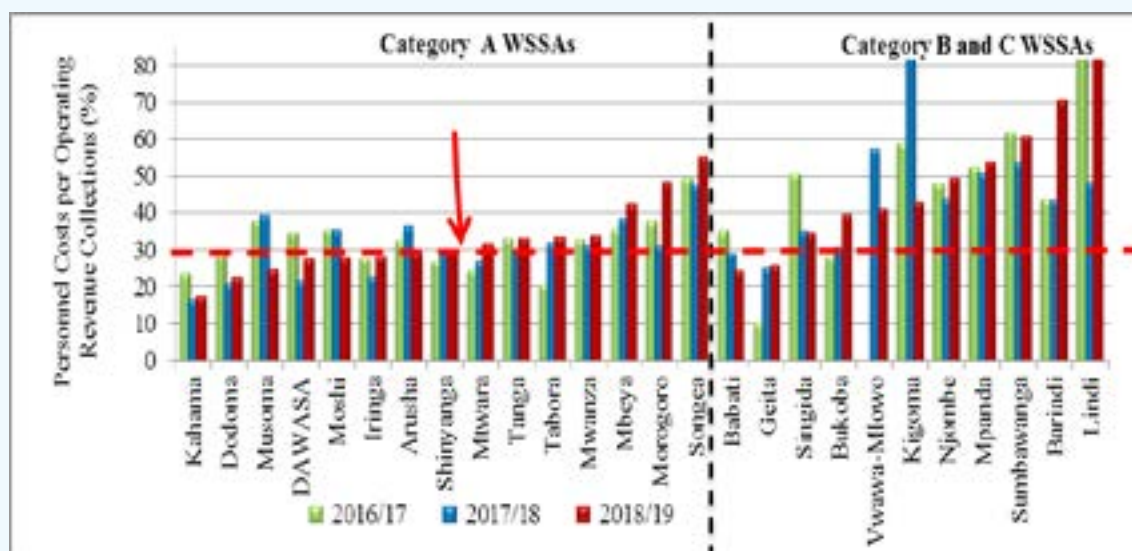
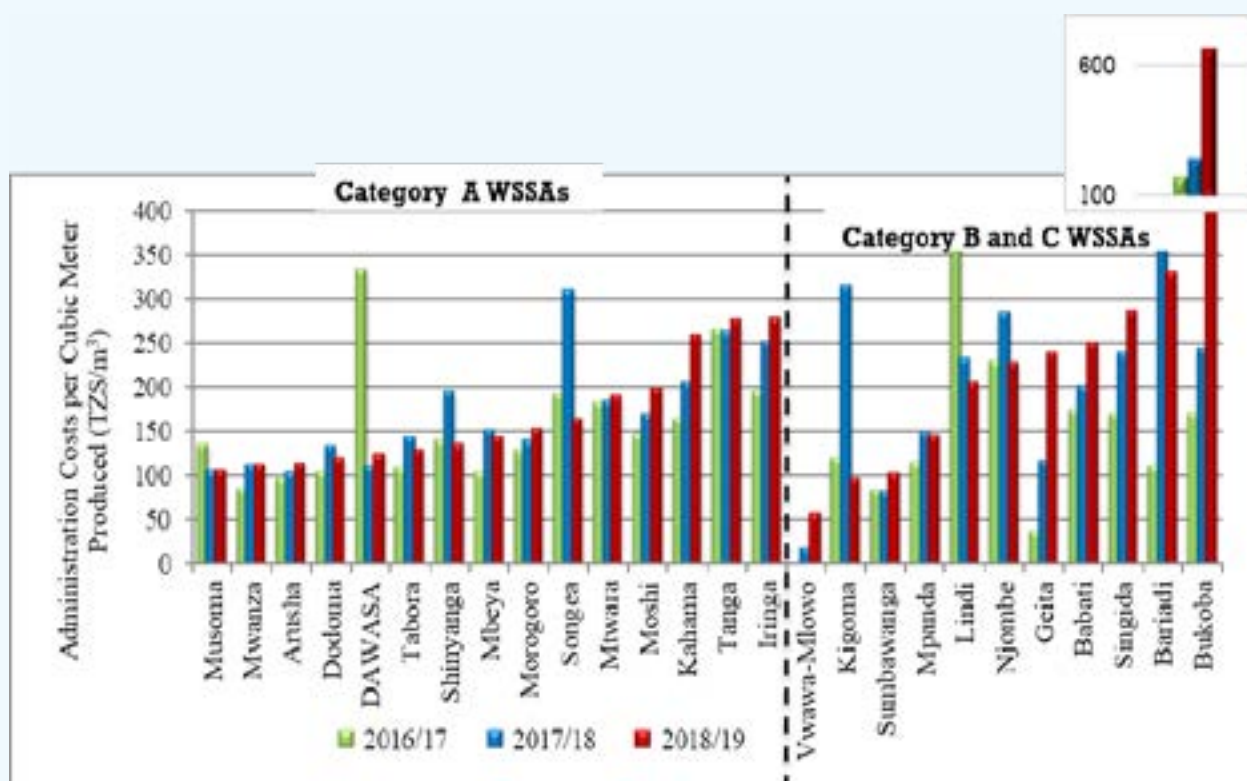


Figure 35: Personnel Costs as a percentage of Revenue collections

In FY 2018/19, only ten WSSAs registered personnel costs as a percentage of revenue collections of below 30% as recommended by the Ministry of Water. These are; Shinyanga, Arusha, Iringa, Moshi, DAWASA, Geita, Musoma, Babati, Dodoma and Kahama WSSA. Further, most the utilities except Lindi, Bariadi, Sumbawanga, Songea, Mpanda, Njombe, Morogoro, Mbeya, Bukoba, Mwanza, Tabora, Tanga, Mtwara WSSAs have improved their personnel costs as a percentage of revenue collections towards the 30% benchmark through improved revenue collections.

#### 4.2.4 Administrative Costs

Administration costs are indirect costs, as they are not directly linked to water production. As such costs increase, a utility deviates from the core business of providing water and sanitation services. During FY 2018/19, administration costs for all utilities ranged between 106.5 per m<sup>3</sup> and 260.5 per m<sup>3</sup>. In FY 2018/19, on average, administration costs per unit of water production for all utilities increased to TZS 197.3 per m<sup>3</sup> compared to TZS 159.4 per m<sup>3</sup> recorded in FY 2016/17. Figure 36 shows administration costs per cubic meter of water produced.



**Figure 36: Administration Costs per cubic meter of water produced**

In FY 2018/19, Arusha WSSA (TZS 114.9), Mwanza WSSA (TZS 112.4), Musoma WSSA (TZS 106.5), Sumbawanga WSSA (TZS 104.2), Kigoma WSSA (TZS 97.7) and Vwawa-Mlowo WSSA (TZS 57.4) registered lower administration costs per unit of water production. While, Bukoba WSSA (TZS 666.7), Bariadi WSSA (TZS 330.9), Singida WSSA (TZS 286.2), Iringa WSSA (TZS 278.4) and Tanga WSSA (TZS 276.6) registered the higher administration cost per unit of water production.

#### 4.2.5 Cost Structure

##### **Composition of O&M Costs (Excluding Depreciation)**

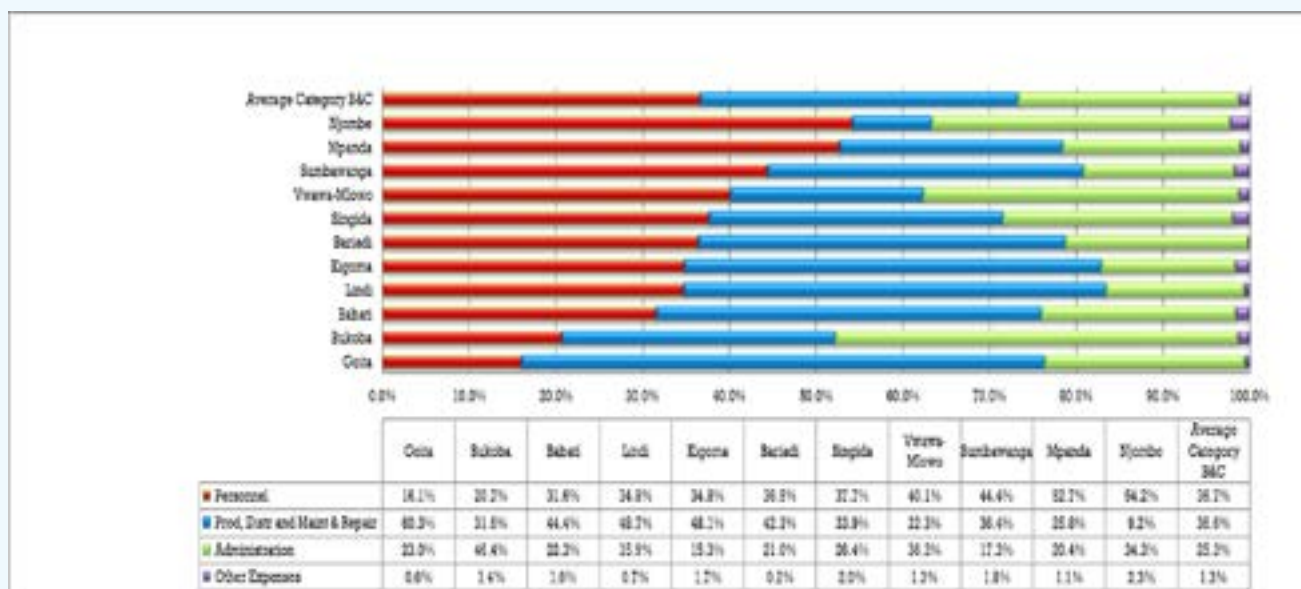
During FY 2018/19, on average, regional utilities' O&M costs excluding depreciation composed of water production, distribution, maintenance and repair costs (38.4%), administration costs (21.6%), personnel costs (37.2%), and other costs (2.8%). For Category A WSSAs, on average, O&M costs consisted of production, distribution and maintenance and repair costs (39.7%), administration costs (18.8%), personnel cost was 37.6% while other costs (3.9%). During FY 2018/19, cost composition is more or less similar to that recorded in FY 2017/18. Figure 37 shows composition of O&M costs excluding depreciation for category A WSSAs.



**Figure 37: Composition of O&M Costs Excluding Depreciation for Category A WSSAs**

The cost structure performance for Category A shows that: In FY 2018/19, Kahama WSSA (19.4%), had the lowest composition of personnel costs out of the total O&M costs while Songea WSSA (62.6%) had the highest. Likewise, Kahama WSSA had the highest proportion of production, distribution, maintenance and repair costs of 59.2% with Songea WSSA having the lowest at 13.6% compared to other WSSAs in Category A. Further, Administration cost was the highest proportion of O&M in Moshi WSSA (31.4%) and lowest in Shinyanga WSSA (9.6%)

For Category B and C WSSAs, the distribution of O&M costs was composed of production, distribution, maintenance and repair costs (36.6%), administration costs (25.3%) while personnel costs were 36.7%. Other costs constituted 1.3% of total O&M costs. Figure 38 shows composition of O and M costs excluding depreciation for category B and C WSSAs.

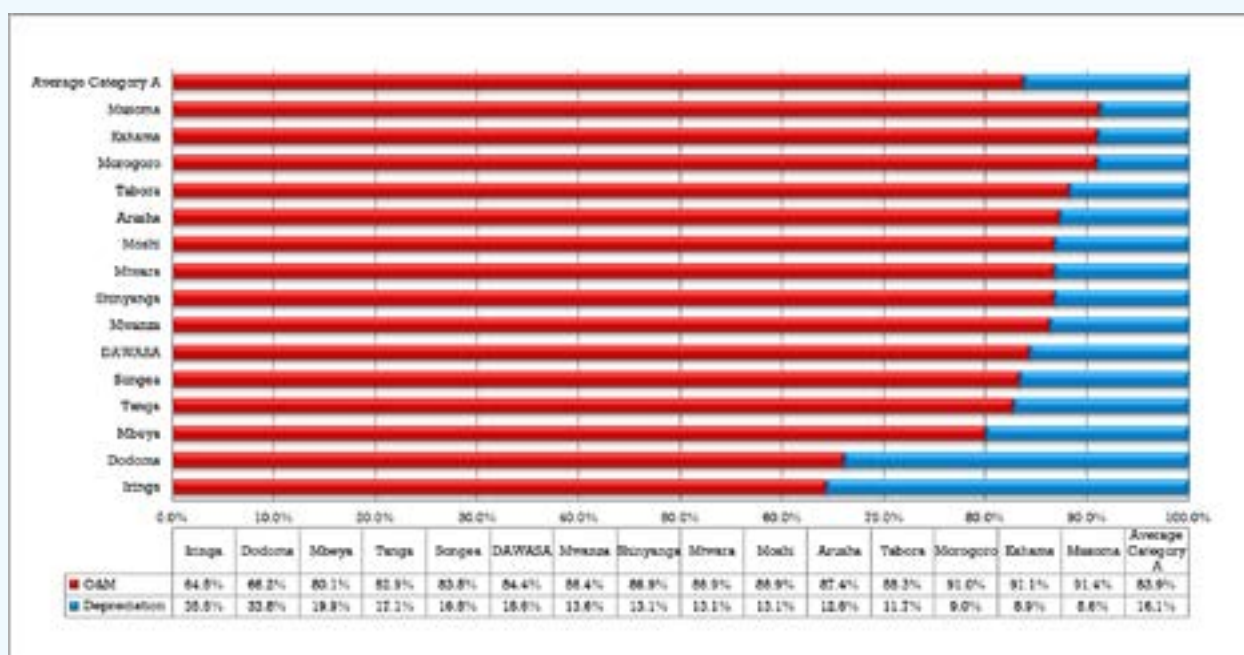


**Figure 38: Composition of O&M Costs Excluding Depreciation for Category B and C WSSAs**

For Category B and C regional WSSAs, in FY 2018/19, Geita WSSA registered the highest proportion of production, distribution, maintenance and repair costs of 60.3% with Njombe WSSA recording the lowest at 9.2%. Njombe WSSA had the highest personnel costs proportion of O&M costs of 54.2% with Geita WSSA registering the lowest of 16.1%. In FY 2018/19, Bukoba WSSA recorded the highest proportion of administration costs with 46.4% while Kigoma WSSA recorded the lowest at 15.3%.

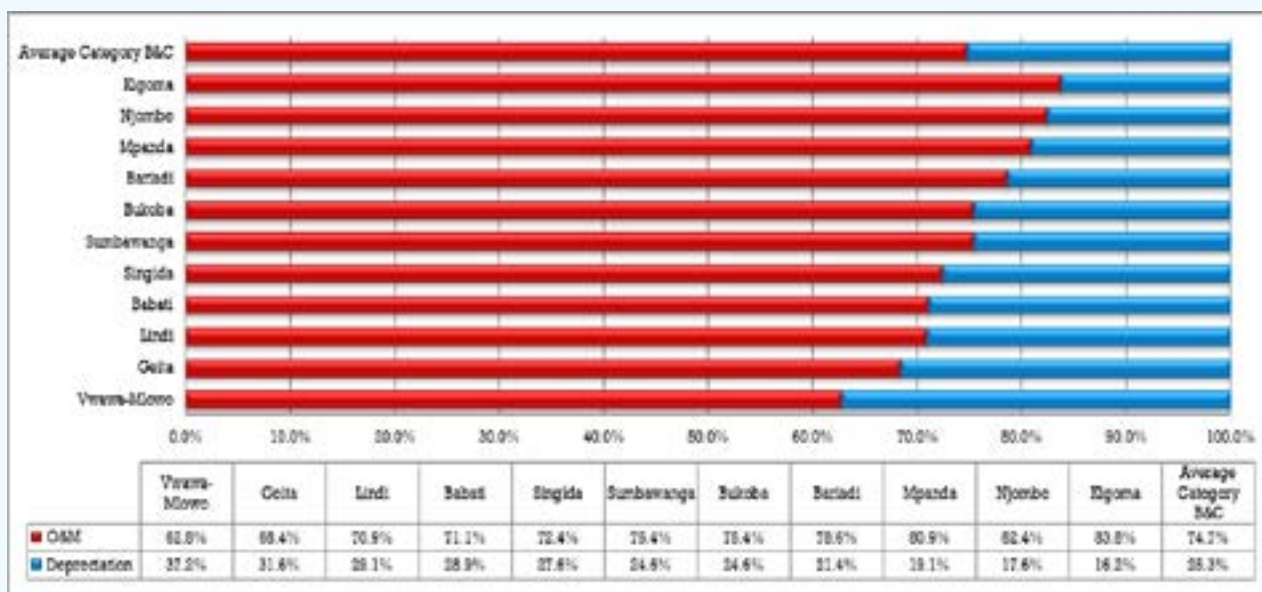
### Depreciation versus Other O&M Costs

During FY 2018/19, on average, regional utilities depreciation costs accounted for 20% of the total operating costs, while other O&M costs accounted for 80%. For Category A WSSAs, on average, depreciation costs accounted for 16.1%, while other operating costs averaged 83.9%. Figure 39 shows composition of O and M costs with depreciation for category A WSSAs.



**Figure 39: Composition of O&M Costs with Depreciation for Category A WSSAs**

In FY 2018/19, Iringa WSSA recorded the highest proportion of depreciation costs with 35.5% while Musoma WSSA recorded the lowest at 8.6%. The high depreciation for Iringa WSSA is attributable by the recent completed water supply project, whereas the low depreciation cost for Musoma is due to non-inclusion of new project in its financial statements. Figure 40 shows composition of O and M costs with depreciation for category B and C WSSAs.



**Figure 40: Composition of O&M Costs with Depreciation for Category B & C WSSAs**

For Category B and C WSSAs, on average, depreciation costs accounted for 25.3%, while other operating costs averaged at 74.7%. Vwawa-Mlowo WSSA recorded the highest proportion of depreciation costs with 37.2% while Kigoma WSSA recorded the lowest at 16.2%.

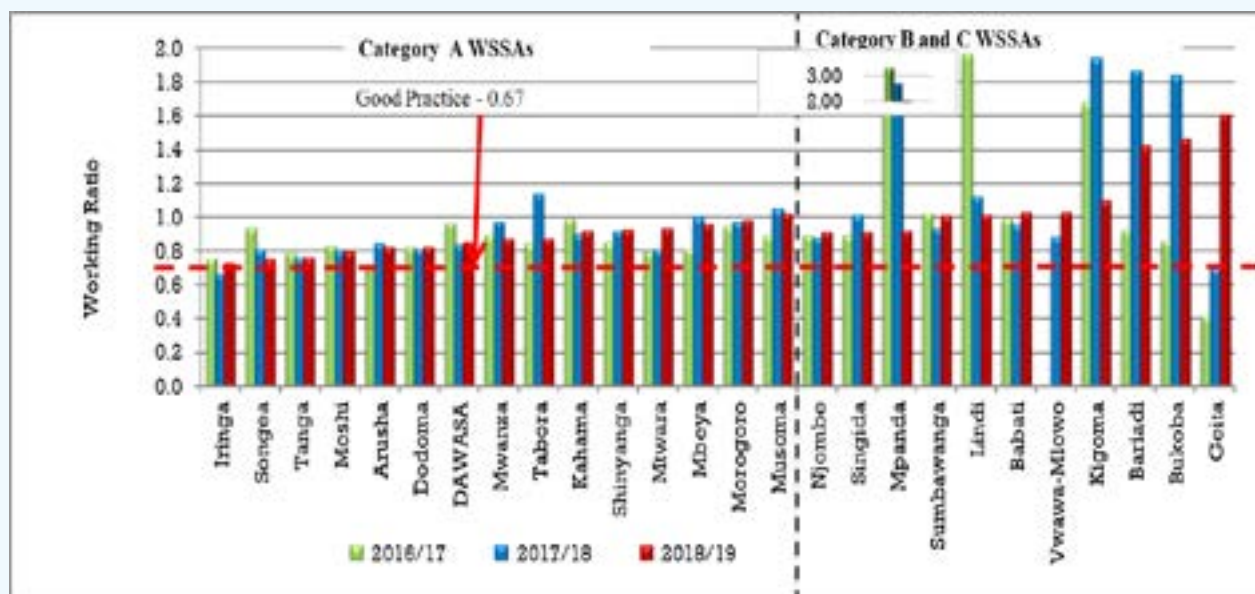
#### 4.2.6 Cost Recovery

##### **Working and Operating Ratio**

Both Working and Operating Ratios measure the ability of WSSAs to recover their operational costs from their annual revenues. The recommended ratio should be less than one.

##### **Working Ratio (WR)**

There has been trivial progress of ratio between utility's total annual expenses – excluding depreciation and debt related expenses – and its annual revenue recorded from previous financial year. In FY 2018/19, working ratio was 0.97 that is a slight improvement in performance compared to 1.02 registered in FY 2017/18. Figure 41 shows working ratio for regional water WSSAs.

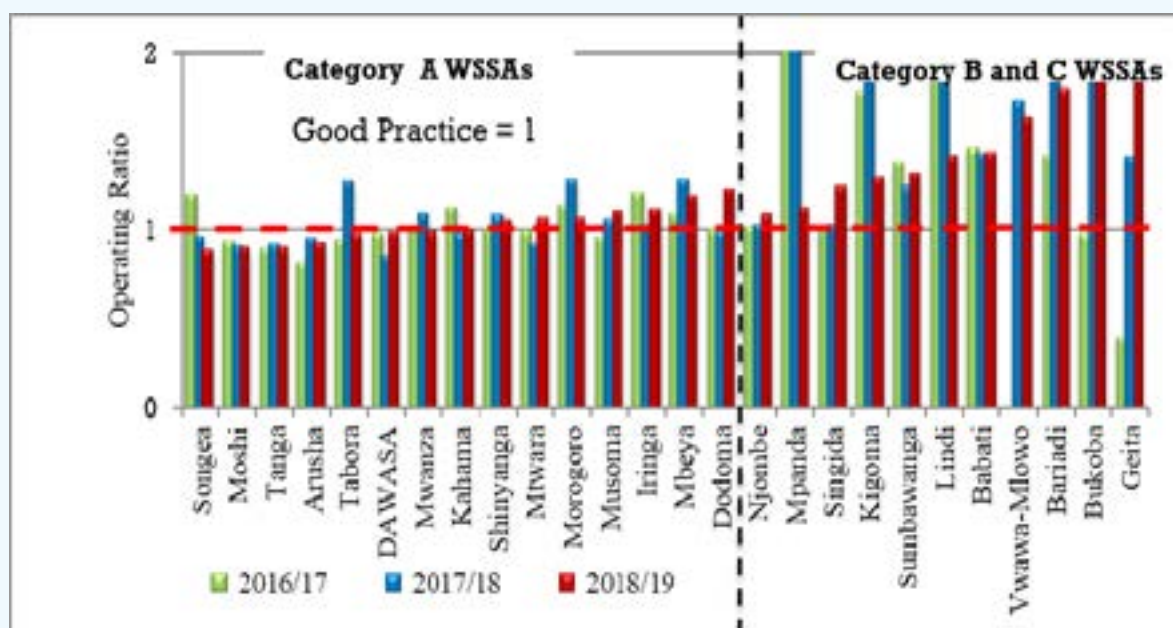


**Figure 41: Working Ratio for Regional Water WSSAs**

During FY 2018/19, Iringa WSSA was the best performer in this indicator with a ratio of 0.72 while Geita WSSA was the least performer, registering the highest working ratio of 1.59. Figure 41 shows detailed three years Working Ratio for Regional WSSAs.

### Operating Ratio (OR)

The operating ratio is an indicator used to measure a utility's ability to recover operating costs (including depreciation) from its annual revenues. In FY 2018/19, on average, the operating ratio improved to 1.20 from 1.34 recorded in FY 2017/18. Figure 42 shows operating ratio for regional water WSSAs.

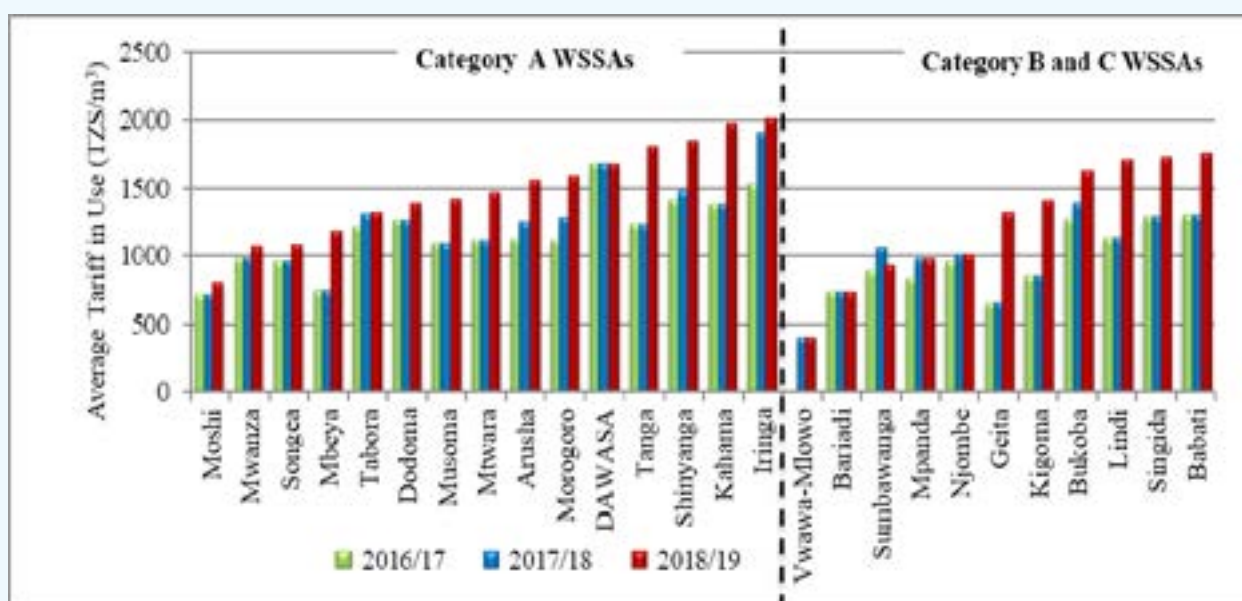


**Figure 42: Operating Ratio for Regional Water WSSAs**

In FY 2018/19, Geita WSSA was the least performer with the highest Operating Ratio of 2.33 while Songea WSSA was best performer with lowest Operating Ratio of 0.89. Further Mwanza, DAWASA, Tabora, Arusha, Tanga, Moshi and Songea WSSAs were the only WSSAs with the Operating Ratio of less than or equal to one. Further, in FY 2018/19 Bukoba, Bariadi, Lindi, Kigoma, Mbeya, Morogoro, Shinyanga, Vwawa-Mlowo, Mwanza, Tabora, Arusha, Mpanda, Tanga, Moshi and Songea WSSAs managed to reduce their operating ratios compared to the levels achieved during FY 2017/18. Table A2.17-Appendix 2 shows three years detailed operating ratio for regional WSSAs.

#### 4.2.7 Average Water Tariff in Use

Average Water Tariff in Use are weighted average of nominal metered tariffs, as approved by EWURA, of all customer categories weighted by their respective consumption levels. These tariffs were applicable as of 30<sup>th</sup> June, 2019. In the absence of the consumption levels, the domestic tariff are estimate of the average water tariff in use. Figure 43 shows average tariff in use for regional WSSAs.



**Figure 43: Average Tariff in Use for Regional WSSAs**

In FY 2018/19, the average tariff for WSSAs increased to an average of TZS 1,406.83 per m<sup>3</sup> compared to TZS 1,088.6 per m<sup>3</sup> recorded in FY 2016/17. In 2018/19, Iringa had the highest average tariff of about TZS 2,000.0 per m<sup>3</sup> with Vwawa-Mlowo WSSA having the least tariff at TZS 395.0 per m<sup>3</sup>. The variations in tariff were mostly due to the variations in methods employed in the water abstraction, treatment and distribution. Table A2.17 Appendix 2 detailed three years average tariff in use for regional WSSAs from FY 2016/17 to FY 2018/19.

## 5.0 COMPLIANCE WITH REGULATORY DIRECTIVES AND REQUIREMENTS

This Chapter discusses the Regional WSSAs compliance with regulatory directives and requirements in terms of WSSAs' compliance with Tariff Conditions, reporting requirements and Performance Targets as stipulated in WSSAs Business Plans.

### 5.1 Tariff Review and Compliance with Tariff Order

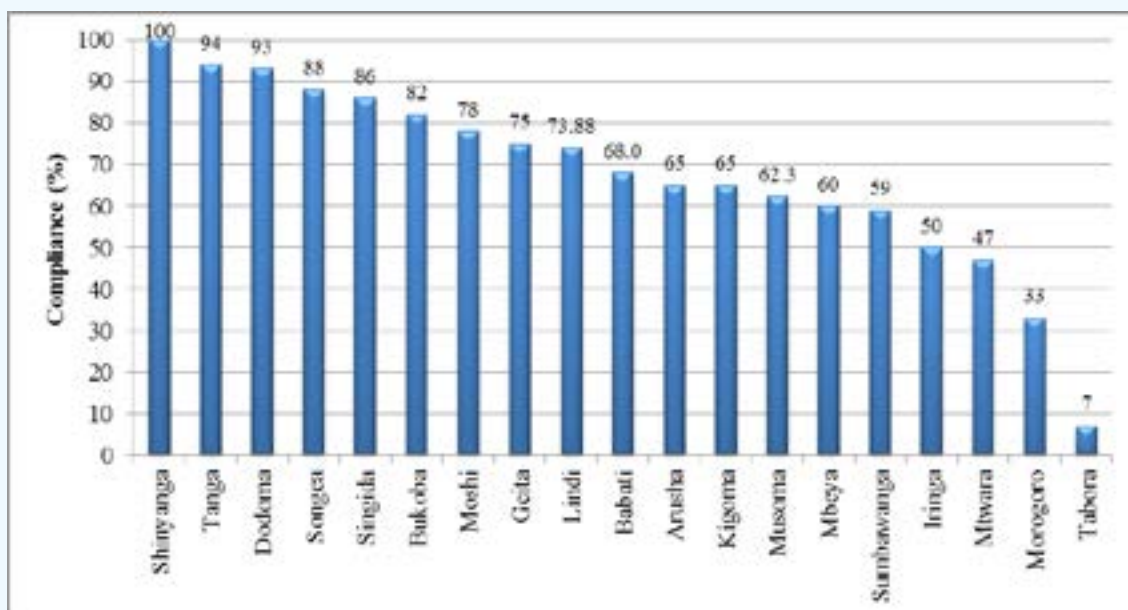
During the period under review, EWURA received tariff review application from 17 Regional WSSAs. In FY 2018/19, total 20 applications from WSSA qualified for EWURA approval, 3 being the applications for FY 2017/18. The approved average tariffs for WSSAs are shown in Table 16.

**Table 16: Tariff Review Determinations for Regional WSSAs**

S/N	Name of WSSA	Previous average tariff (TZS/m <sup>3</sup> )	Approved Average Metered Tariff (TZS/m <sup>3</sup> )			Effective date
			2018/19	2019/20	2020/21	
1	Singida	1,040	1,500	1,500	1,600	1 <sup>st</sup> October 2018
2	Tanga	1,315	1,635	1,805		1 <sup>st</sup> October 2018
3	Mbeya	720	1,100	1,100	1,200	1 <sup>st</sup> December 2018
4	Kigoma	780	1,400	1,400	1,400	1 <sup>st</sup> March 2019
5	Geita	390	1,250	1,250	1,250	1 <sup>st</sup> March 2019
6	Sumbawanga	975	1,010	1,130	1,250	1 <sup>st</sup> July 2019
7	Babati	1,085	1,600	1,600	1,700	1 <sup>st</sup> May 2019
8	Njombe	980	1,590	1,830	1,900	1 <sup>st</sup> July 2019
9	Iringa	1,820	1,970	2,060	2,250	1 <sup>st</sup> May 2019
10	Moshi	755	940	1,120	1,120	1 <sup>st</sup> July 2019
11	Tabora	1,340	1,355	1,355		1 <sup>st</sup> May 2019
12	Vwawa-Mlowo	395	1000	1,100	1,100	1 <sup>st</sup> July 2019
13	Dodoma	1,190	1,245	1,260		1 <sup>st</sup> June 2019
14	Shinyanga	1280	1580	1650	1740	1 <sup>st</sup> February 2019
15	Songea	952	1,077	1,178	1,226	1 <sup>st</sup> October 2018
16	Kahama	1,015	1,688	1,888	2,069	1 <sup>st</sup> January 2019
17	Bukoba	1,370	1,600	1,870	2,190	1 <sup>st</sup> January 2019
18	Musoma	990	1,150	1,210	1,210	1 <sup>st</sup> January 2019
19	Lindi					1 <sup>st</sup> January 2019
20	Mtwara	1,090	1,260	1,280	1,280	1 <sup>st</sup> January 2019

Compliance with Tariff Order is evaluated in terms of compliance with tariff conditions contained in the Tariff Orders of respective WSSA. The evaluation for compliance with Tariff Order for WSSAs of DAWASA, Mwanza, Kahama, Njombe, Bariadi and Mpanda were not included since their tariffs were outdated. During the year under review, the overall compliance with tariff conditions among Regional WSSAs was 67.8%. In FY 2016 /17 and 2017 /18, the compliance was 65% and 88% respectively.

Figure 44 presents an overall tariff conditions compliance during the reporting period. Details of the compliance for each utility including their compliance evaluation criteria are shown in Figure 43 and presented in Appendix 4: Table A4.2.



**Figure 44: Evaluation of compliance with tariff conditions for Regional WSSAs**

## 5.2 Reporting Obligations

According to Water Supply and Sanitation Act (Water Supply and Sanitation Services) Rules, GN 387 published on 25 November 2011, WSSAs are obliged to submit to EWURA monthly and annual performance data through the Water Utilities Information System known as Majlis (web-based software) and their Annual Performance Reports including Financial Statements.

Generally, the good performers in report submission were Kahama, Moshi, Mwanza, Songea, Tabora, and Sumbawanga and Lindi WSSAs that managed to submit all the required reports timely. The least performer in the submission of the reports is Vwawa- Mlowo WSSA that did not comply with submission of all reports. Appendix 5 presents the details on the reports submission. The Regional WSSAs compliance with submission of annual technical and financial statements are as follows;

### 5.2.1 Majlis Reports

#### Monthly Majlis Reports

WSSAs are required to submit their monthly Majlis reports by 14<sup>th</sup> day of the following month. During the reporting period, with exception of Kahama, Moshi, Songea, Mwanza, Tabora, Sumbawanga and Lindi WSSAs, the remaining WSSA the remaining WSSAs did not submit all 12 Majlis monthly reports timely. The overall compliance to the monthly Majlis report submission is 74%, which is an improvement, compared to 52% attained in FY 2016/17 and 62% attained in FY 2017/18.

#### Annual Majlis Reports

WSSAs are required to submit their annual Majlis report by 30<sup>th</sup> September each year. During the year under review, 20 WSSAs submitted their annual Majlis report on time while two (2) submitted their annual Majlis reports late and the remaining four (4) did not submit their annual Majlis reports. The WSSAs that submitted the reports late were Arusha and Mtwara while the WSSAs that did not submit their annual Majlis reports were Mbeya, Mpanda, Njombe and Vwawa-Mlowo. The overall compliance to the annual Majlis report submission in FY 2018/19 is 77% similar to 77% the same to that attained in FY 2017/18. Compliance in the FY 2016/17 was 52%.

## 5.2.2 Annual Technical and Financial Reports

Before the end of 30<sup>th</sup> September of every year, water utilities are required to submit their draft Annual Technical Report and draft Financial Statements. Table 17 shows the three years report submission status for Regional WSSAs.

### **Annual Technical Reports**

During the year under review, 19 out of 26 Regional WSSAs submitted their reports on time, five (5) submitted their reports late and two (2) WSSA did not submit the annual technical report. The WSSAs that submitted the report late were Arusha, Mtwara, Musoma, Babati, and Vwawa Mlowo while Morogoro and Bariadi WSSA did not.

### **Annual Financial Reports**

There has been uneven trend in the status of submission of financial statements among the Regional WSSAs. The number of WSSAs complying with timely submission of financial statements increased from 20 in FY 2016/17 to 21 in FY 2017/18 and 24 WSSAs in FY 2018/19. The WSSAs that did not comply with the financial statements submission deadline were Bariadi and Vwawa-Mlowo.

**Table 17: Three Years Reports Submission Status for Regional WSSAs**

	<b>Required Number of Reports</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
Number of Timely submitted Majls Monthly Reports	312	252	279	230
Number of Timely submitted Majls Annual Reports	26	13	20	20
Number of Timely submitted Technical Reports	26	20	21	19
Number of Timely submitted Financial Reports	26	20	21	24

## 5.3 Compliance with Business Plan Targets

The compliance with the Business Plans targets is evaluated based on selected 11 key performance indicators in accordance with Performance Benchmarking Guidelines (2018). These indicators have significant impact on the overall performance of the utility. The detailed analysis of Compliance with Business Plan targets is discussed in Chapter 6.

## 5.4 Compliance with Remittance of Regulatory Levy

During FY 2018/19, Regional WSSAs continue to remit regulatory levy as required by Section 43 of EWURA Act, Cap 414. The due date according to EWURA (fees and Levies Collection Procedures), 2010 is 31<sup>st</sup> August of each calander year.

There has been a continuous improvement among Regional WSSAs in terms of compliance with remittance of regulatory levy. The overall compliance with remittance of regulatory levy improved from 39% in FY 2016/17 to 66% in FY 2018/19. The performance trend in terms of number of Regional WSSAs fully complying with remittance of regulatory levy improved from two (2) WSSAs in FY 2016/17 to five (5) WSSAs in FY 2017/18 and thereafter decreased to three (3) WSSAs in FY 2018/19.

In FY 2018/19, Moshi, Dodoma and Iringa WSSAs were the best performers in the remittance of regulatory levy with 100% compliance. For the past three years, the least performers in the remittance of regulatory levy was Kigoma WSSA with compliance of 0% in FY 2016/17 and FY 2017/18 and 2% in FY 2018/19. A list of water utilities and status of payment of regulatory levy as of 30<sup>th</sup> June 2019 is as shown in Appendix 7.

## 6.0 PERFORMANCE RANKING

This chapter outlines Performance ranking of Regional WSSAs according to the EWURA Performance Benchmarking Guidelines for Water Supply and Sanitation Authorities, 2018. Ranking of the performance of WSSAs is in two fold; the overall ranking and the utility ranking.

### 6.1 Overall Ranking

The overall ranking intends to gauge the overall performance of WSSAs by taking into consideration individual efforts as well as external factors such as financing from the government and development partners. In obtaining the score for overall ranking EWURA considers two types of scores which are utility indicator performance score and compliance to regulatory requirement score. The utility indicator performance score accounts for 70% and compliance to regulatory requirement is 30% of the total performance score. The output of overall ranking is identification of the overall best performing WSSA.

### 6.2 Utility Ranking

The utility ranking measures the efforts that the utility has made in attaining the performance targets specified in respective utility business plan. The source of data on performance target is the WSSA's approved Business Plan. In the absence of Business Plan, the WSSAs was awarded zero (0) score on attainment of performance targets

### 6.3 Procedure for Ranking

#### 6.3.1 Overall Ranking Procedure

The total performance scores of WSSAs were computed as a sum of the performance score for each indicator and the compliance to regulatory requirement score. The overall ranking of the performance of WSSAs was obtained as follows:-

i. **Determining the KPI achievement of WSSAs.**

Performance score for each performance indicator was calculated as a sum of scores based on best performer, attainment of performance target, confidence grading and attainment of service level benchmarks multiplied by the respective indicator weighting as described in Table 18.

**Table 18: Key Performance Indicator Weights**

Indicator No.	Performance Indicators	Weight	Service level Benchmark
KPI 1	Proportion of population served with water (%)	9%	100
KPI 2	Average hours of supply (hrs.)	9%	24
KPI 3	Water quality compliance		
	E-Coli	14%	100
	Turbidity	9%	100
KPI 4	Metering ratio (%)	9%	100%
KPI 5	Non-Revenue Water – NRW (%)	9%	≤ 20
KPI 6	Revenue collection efficiency (%)	14%	≥ 95
KPI 8	Operating ratio (ratio)	5%	<0.8

KPI 9	Personnel/1000 (W&S) connections (ratio)	5%	$\leq 5$
KPI 10	Wastewater quality compliance -COD and BOD (%)	9%	100
KPI 11	Proportion of population receiving WSSAs regulated sanitation services (%)	8%	100%

#### (a) Calculating Score based on best performer (SBP)

The maximum score for the best performer on each performance indicator is 70 points. The score for attaining a national average (median) on any performance indicator is 50 points while a score of 0 point is awarded for attaining a minimum performance on any indicator. Intermediate performances were allocated pro rata by interpolating between the minimum, average and best performance.

#### (b) Calculating Scores Based on Attainment of Performance Target (SPT)

WSSAs were awarded 10 points for attaining or surpassing the performance target on each performance indicator. Intermediate performances were allocated pro rata by interpolating between 0 and 10 points. In addition, decreasing performances as compared to actual performance in the previous year was also awarded 0 points.

#### (c) Calculating Scores Based Confidence Grading (SCG)

WSSAs were awarded 10 points for surpassing the Confidence Grading of B2, 5 points for attaining a confidence grading of B2 and 0 points for a Confidence Grading below B2 on each performance indicator. The evaluation criteria for allocating confidence grading is presented in Table 19

**Table 19: Assessment Confidence Grading on Data Reliability and Accuracy**

Data Reliability		
Reliability Bands		Definition
A	Reliable	Data based on sound records procedures investigations or analyses that are properly documented and recognized as the best available assessment methods
B	Fairly Reliable	Data based on records, procedures, investigations or analyses that are properly documented and recognized as the best available assessment methods. However, up to 30% of the data is based on extrapolations.
C	Unreliable	Data based on extrapolation from records that cover more than 30 percent of the service providers system.
Data Accuracy		
Accuracy Band		Associated Uncertainty
1		(0 – 5%): Better than or equal to +/- 5%
2		(5 – 20%): Worse than $\pm 5\%$ but better than or equal to + / -20%
3		>20%

#### (d) Calculating scores based on attainment of service level Benchmark (SSLB)

WSSAs were awarded 5 points for being within the acceptable boundaries and 0 points for not attaining the acceptable boundaries for the KPIs. Scores for utilities that surpass the acceptable boundaries were allocated pro-rata by interpolating between 5 and 10 points. A score of 10 points was allocated for attaining or surpassing the service level benchmarks.

## ii. Determining the Score for Compliance with Regulatory Requirements (CRR)

The score based on compliance with regulatory requirements was calculated basing on attainment of score based on the weight of each obligation as presented in Table 20.

**Table 20: Compliance to regulatory requirements**

Code No.	Regulatory Requirement	TotalScore
CRR1	Timely submission of monthly Majls reports	12
CRR2	Timely submission of draft annual Majls report	5
CRR3	Timely submission of draft annual report	5
CRR4	Timely submission of draft financial statements	5
CRR5	Payment of regulatory levy	25
CRR6	Presence of approved business plan	10
CRR7	Presence of approved customer service charter	10
CRR8	Submission of final annual report for the previous year	6
CRR9	Availability of Water Quality Monitoring Plan	14
CRR10	Availability of faecal sludge treatment facilities	8






### 6.3.2 Utility Ranking Procedure

Utility ranking is determined by summing up the scores for attainment of performance targets for each indicator as presented in Table 18. WSSA were awarded 10 points for attaining or surpassing the performance target on each performance indicator. Intermediate performances were allocated pro rata by interpolating between 0 and 10 points. In addition, decreasing performances as compared to actual performance in the previous year was also awarded 0 points.

### 6.4 Classification of Performance Scores

The overall score of each WSSA was classified and identified with a distinct colour. The details of the classification colour code and interpretation is as shown in Table 21.

**Table 21: Classification of Overall Scores.**

Total Score	Classification	Colour	Interpretation
100 - 85	A		Excellent
84 - 70	B		Very Good
69 - 55	C		Good
54 - 40	D		Fair
39 - 0	E		Unsatisfactory

## 6.5 Results of Performance Ranking

### 6.5.1 Overall Ranking Results

Based on the above overall ranking criteria, Moshi WSSA emerged the overall best utility in the provision water supply services after scoring 89.8 points, ranked as Excellent. On the other hand, Vwawa-Mlowo WSSA was the overall least performer in the provision of water services after scoring 19.5 points ranked as Unastisfactory.

### **6.5.2 Utility Ranking Results**

Based on the criteria for determining utility, Moshi WSSA was the best performer under the category of utility ranking in water services while Bariadi WSSA was the least. Generally, the utility ranking results show that the performance of Regional WSSAs in attaining performance targets indicated in their Business Plans is unsatisfactory.

Table 22 summarizes the results on the performance ranking evaluation Regional WSSAs in provision of water supply and sanitation services.

**Table 22: Summary of Regional WSSAs' Ranking in the Provision of Water and Sanitation Services**

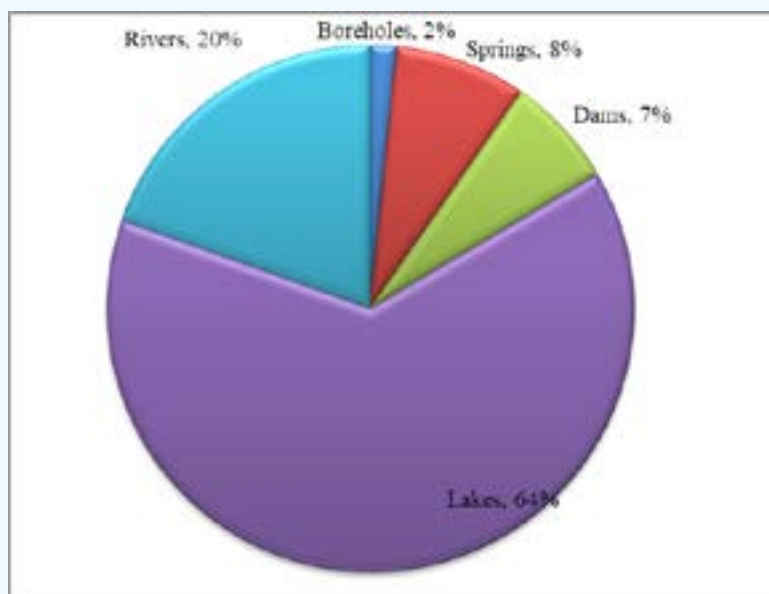
SN	Utility Name	Total Weighted Score Based on KPIs	Score on Compliance to Regulatory Requirements	Overall Ranking				Utility Ranking Score					
				Overall Ranking Score	Classification	Interpretation	Overall Rank (2018/19)	Previous Year Rank (2017/18)	Previous Year Rank (2016/17)	Utility Ranking Score	Classification	Interpretation	Utility Rank (2018/19)
1	Arusha	48.1	20.0	68.2	C	Good	9	11	12	51.1	D	Fair	3
2	Dodoma	49.0	26.4	75.4	B	Very Good	6	9	13	37.8	E	Unsatisfactory	14
3	Iringa	53.1	29.7	82.8	B	Very Good	2	2	14	50.4	D	Fair	5
4	Mbeya	49.9	14.9	64.8	C	Good	12	12	15	22.4	E	Unsatisfactory	22
5	Morogoro	50.4	15.9	66.3	C	Good	10	13	10	44.2	D	Fair	7
6	Moshi	59.8	30.0	89.8	A	Excellent	1	3	1	63.0	C	Good	1
7	Mtwara	41.9	16.8	58.7	C	Good	17	8	7	32.2	E	Unsatisfactory	16
8	Musoma	40.8	16.8	57.6	C	Good	18	21	11	38.5	E	Unsatisfactory	13
9	Mwanza	57.1	22.5	79.6	B	Very Good	3	10	6	50.5	D	Fair	4
10	Shinyanga	43.0	21.1	64.1	C	Good	13	7	8	25.9	E	Unsatisfactory	20
11	Songea	56.1	19.5	75.6	B	Very Good	5	6	9	31.3	E	Unsatisfactory	17
12	Tabora	51.3	22.5	73.8	B	Very Good	7	15	5	51.5	D	Fair	2
13	Tanga	53.4	24.6	78.0	B	Very Good	4	1	3	48.3	D	Fair	6
14	Bukoba	33.0	23.8	56.8	C	Good	19	17	4	17.1	E	Unsatisfactory	25
15	Kigoma	43.0	20.4	63.4	C	Good	14	22	18	42.1	D	Fair	9
16	Singida	41.7	19.2	60.9	C	Good	15	4	21	42.2	D	Fair	8
17	Sumbawanga	40.6	19.6	60.2	C	Good	16	20	16	33.5	E	Unsatisfactory	15
18	Babati	33.2	21.5	54.7	D	Fair	20	14	19	28.7	E	Unsatisfactory	19
19	Lindi	32.8	18.6	51.4	D	Fair	23	18	25	38.9	E	Unsatisfactory	12
20	Bariadi	19.1	8.4	27.5	E	Unsatisfactory	25	24	23	0.0	E	Unsatisfactory	26
21	Geita	30.9	23.5	54.4	D	Fair	21	23	22	40.8	D	Fair	10
22	Mpanda	29.1	15.3	44.4	D	Fair	24	25	24	19.9	E	Unsatisfactory	23
23	Njombe	37.7	15.6	53.3	D	Fair	22	19	20	39.7	E	Unsatisfactory	11
24	Kahama	41.8	26.6	68.4	C	Good	8	5	2	30.6	E	Unsatisfactory	18
25	DAWASA	43.7	21.6	65.3	C	Good	11	16	17	25.8	E	Unsatisfactory	21
26	Vwawa Mlowo	10.5	9.0	19.5	E	Unsatisfactory	26	na	na	17.8	E	Unsatisfactory	24

**PART II:**  
**PERFORMANCE OVERVIEW OF NATIONAL**  
**PROJECTS WSSAs**

## 7.0 TECHNICAL OPERATIONS

### 7.1 Water Sources and Abstraction

In the year under review, water abstraction from various water sources was in the proportions as shown in Figure 45. Considering individual contribution of each type of source, the dominant water sources are lakes and rivers, which together contributed 84% of the total amount of water abstracted. Maswa and Makonde WSSAs registered high increases in water abstraction. On the other hand, HTM and Wanging'ombe WSSAs experienced a decrease in water abstraction. Table 23 provide the reasons for WSSAs with significant change in water abstraction. Detailed water abstraction trend for NP WSSAs is shown in Tables A3.1 (a) and Table A3.1 (b) in Appendix 3.



**Figure. 45: Water Sources and Abstraction**

**Table 23; NP WSSAs with Significant Increase/Decrease in Water Abstraction ( $\geq \pm 10\%$ )**

Name of Water Utility	(%) Increase/Decrease	Reason (s)
Maswa	+267.92	Commissioning of new water treatment plant and rehabilitation of the New Sola dam.
Makonde	+40.43	Rehabilitation of boreholes at Mitema wellfield as well as Mkunya spring source.
HTM	-17.54	Pump breakdown at Segera water intake
Wanging'ombe	-28.96	Improved meter reading after installation of bulk water meter respectively

### 7.2 Installed Water Production Capacity

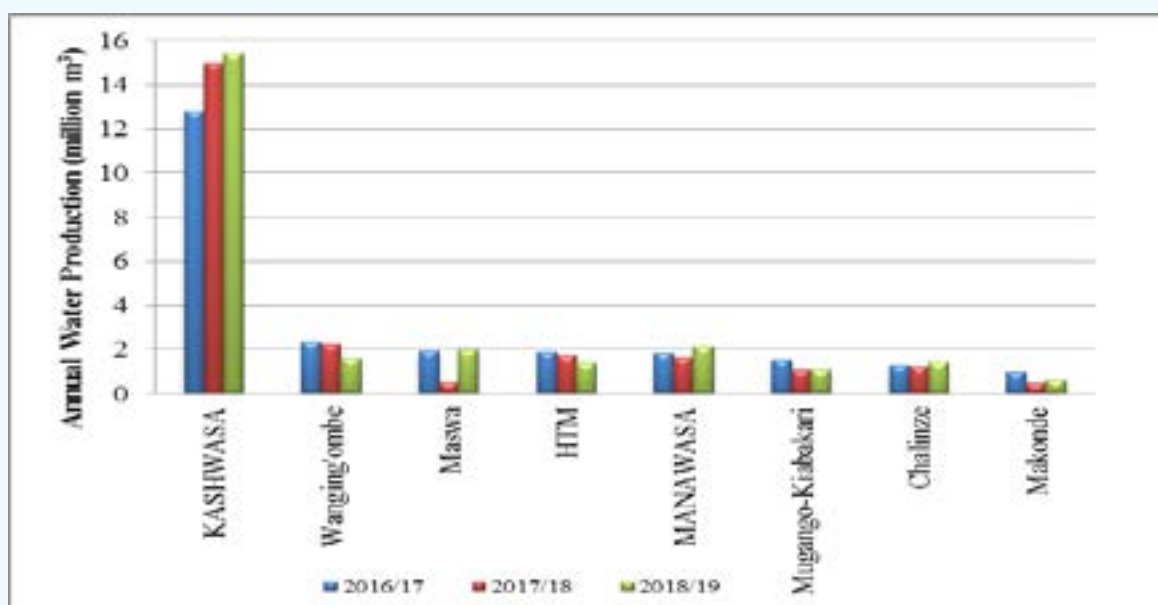
The overall installed water production capacity for NP WSSAs indicates that the installed water production capacity has remained at 59.31 million m<sup>3</sup> for the past three years. KASHWASA has continued to be the NP WSSA with the highest installed water production while Chalinze WSSA was the NP WSSA with lowest water installed capacity, Table A3.2- Appendix 3 presents the summary of installed capacity.

### 7.3 Water Production

NP WSSAs decreased water production from 24.53 million m<sup>3</sup> in FY 2016/17 to 23.73 million m<sup>3</sup> in FY 2017/18 and thereafter increased to 25.48 million m<sup>3</sup> in FY 2018/19. In the year under review, Maswa and MANAWASA registered increase in water production while Wanging'ombe and HTM WSSAs registered a decrease as compared to the previous year. The reasons for the significant change is as those given in Table 24. The water production for NP WSSAs from FY 2016/17 to FY 2018/19 is detailed in Appendix 3: Table A3.2 and presented in Figure 46.

**Table 24: NP WSSAs with Significant Increase/Decrease in Water Production ( $\geq \pm 10\%$ )**

Utility Name	(%) Increase/Decrease	Reason (s)
Maswa	267.92	Commissioning of new water treatment plant and rehabilitation of the New Sola dam.
MANAWASA	33.33	To meet increase in water consumption after expansion of the network following implementation of a project financed jointly by MANAWASA and Masasi Town Council. The areas with increased connections are Mumbaka, Malika, Songambe, Mbonde, Machombe, Ngalinje, Mtakuja, Chiwi, Mkalakate, Sululu, Chikunja, Chikundi, Nangaya, Mpekeso and Matawale.
HTM	-20.47	Fluctuations of river flow due to human activities taking place in the upstream of the intake.
Wanging'ombe	-28.96	Fluctuations of river flow due to human activities taking place in the upstream of the intake.

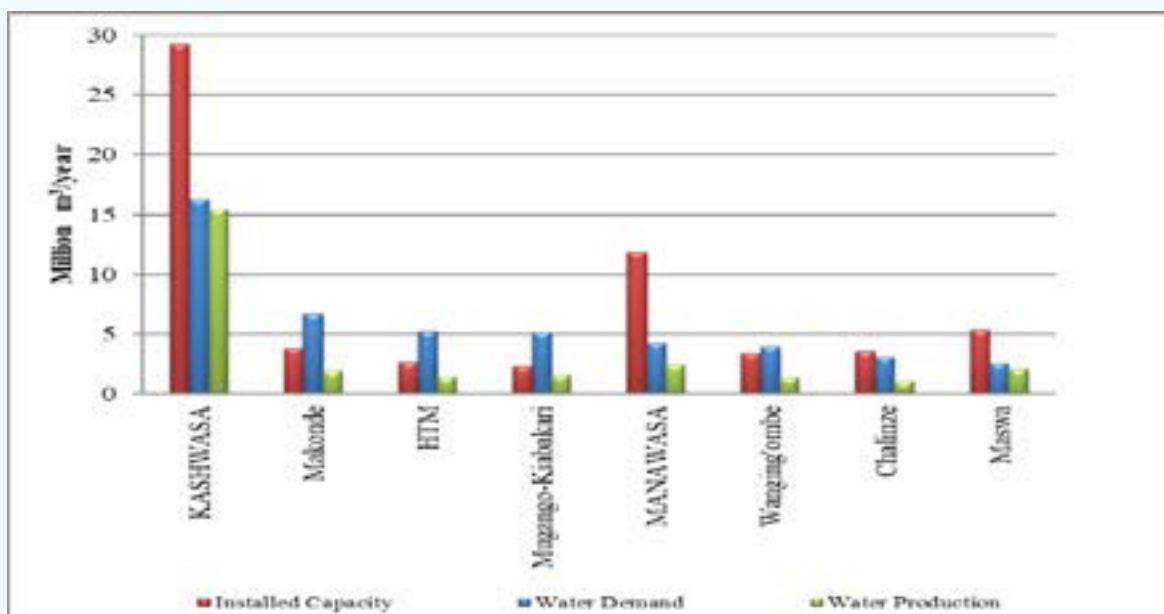

**Figure 46: Annual Water Production Trend**

## 7.4 Water Demand

The annual water demand in the NP WSSAs increased by 1.96 Million m<sup>3</sup> in FY 2018/19. The water demand in MANAWASA increased by 9%, which was the highest increase among NP WSSAs. A detailed trend for the WSSAs' water demand is as presented in Appendix 3: Table A3.2

## 7.5 Comparison of Water Demand and Installed Water Production Capacity

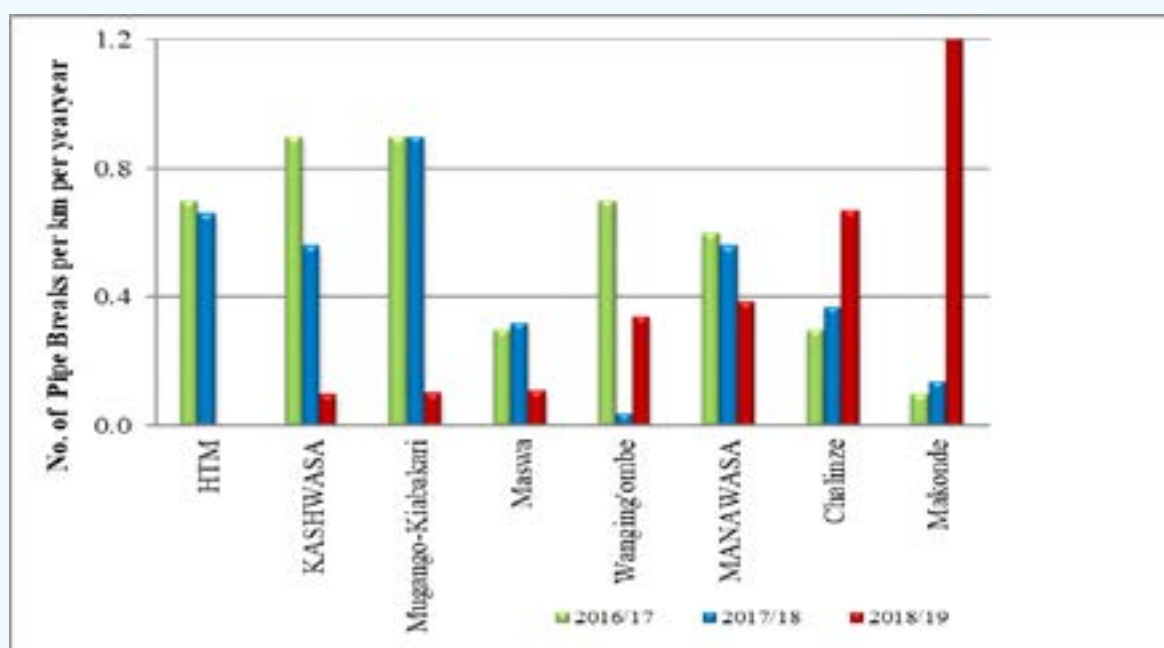
The installed water production capacity was enough to cater for existing water demand for KASHWASA, Maswa WSSA and MANAWASA. However, installed water production capacity for Chalinze, Wanging'ombe, Makonde, HTM WSSAs was insufficient to meet the water demand in the FY 2018/19. A comparison for water demand, installed capacity and water production for FY 2017/18 is shown in Figure 47.



**Figure 47: Comparison of Water Demand, Installed Capacity and Water Production**

## 7.6 Performance of Pipe Network

The performance of water supply network for NP WSSAs is discussed in terms of the number of pipe breaks per kilometer that occurred during the period under review. The performance of water supply network for NP WSSAs is shown in Figure 48 and Table A3.4 of Appendix 3.

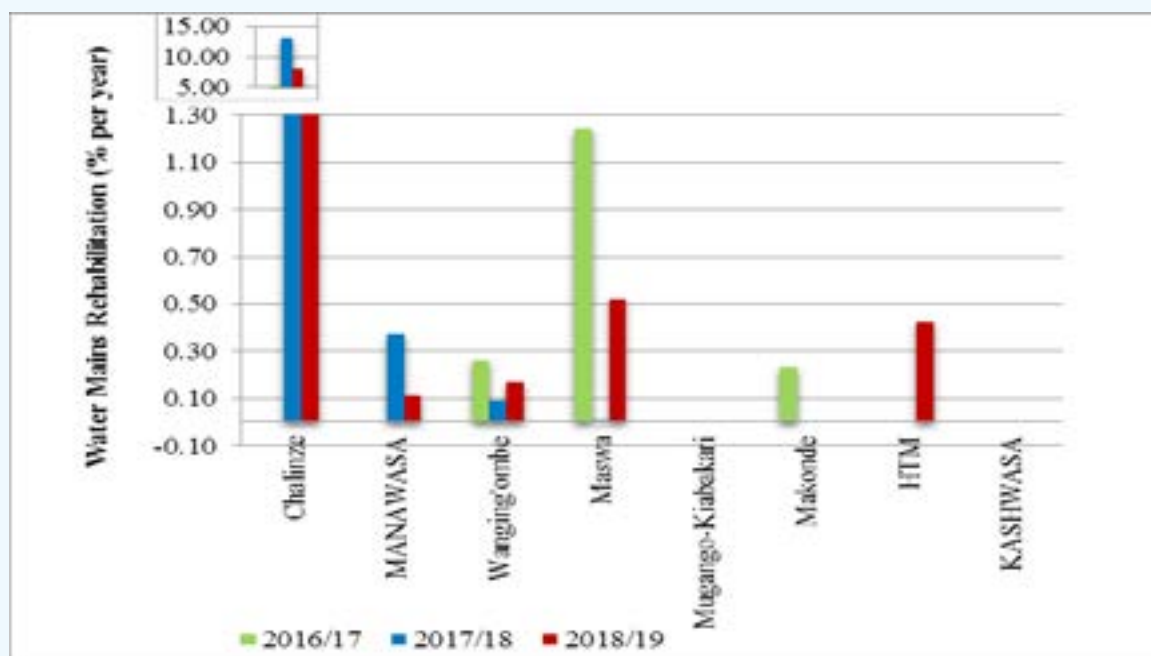


**Figure 48: Number of Pipe Breaks per km per year**

Generally, the number of pipe breaks per km per year decreased from 0.56 in FY 2016/17 to 0.44 in FY 2017/18 and thereafter slightly increased to 0.45 in FY 2018/19. Mugango –Kiabakari and HTM recorded the highest number of pipe breaks per kilometer per year. The number of pipe breaks recorded was 1.5 and 0.7 pipe breaks per kilometre per year respectively.

## 7.7 Water Mains Rehabilitation

The percentage of water main rehabilitation was 0.22% and 1.68 in FY 2016/17 and 2017/18 respectively. In the FY 2018/19 there was a slight improvement to 1.15%. Mugango Kiabakari, Makonde and KASHWASA did not rehabilitate their water mains. The percentage of water mains rehabilitation is presented Figure 49 and detailed in Appendix 3: Table A3.4.



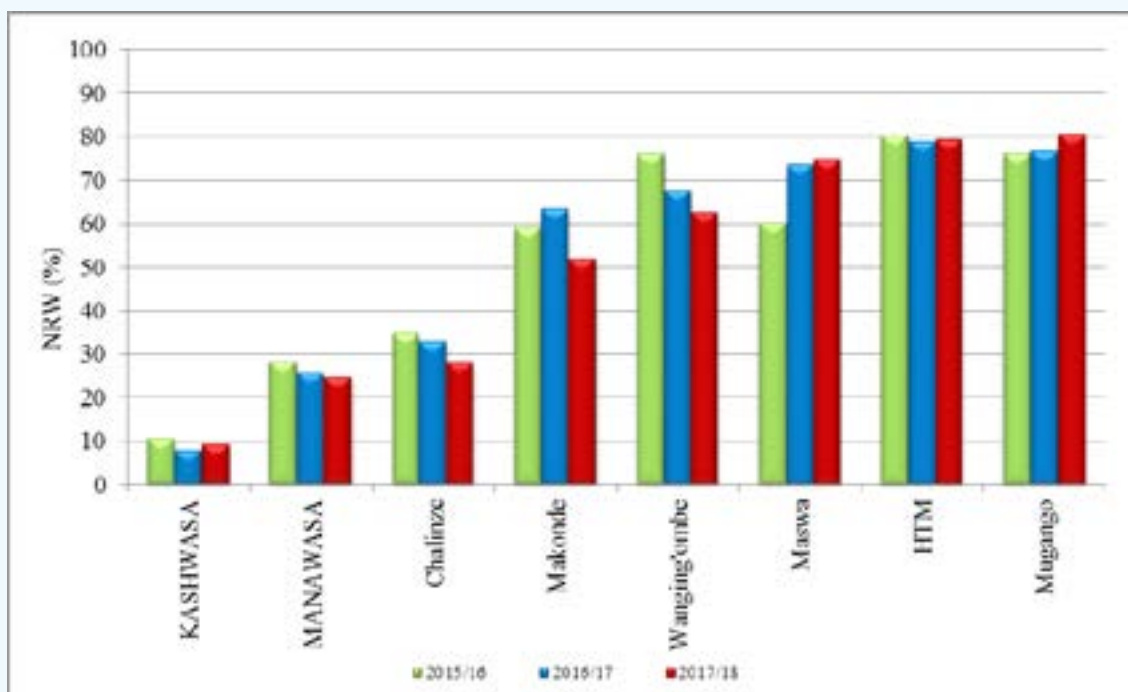
**Figure 49: Water Mains Rehabilitation ( % per year)**

## 7.8 Non-Revenue Water (NRW)

NRW is assessed in terms of (a) NRW as a percentage of water production, and (b) NRW as volume of water loss per kilometer of pipe network per day. Due to their operations modality, the NRW as volume of water loss per water connection per day in NP WSSAs is not discussed. The results of the computations are presented in Appendix 3: Table A3.5.

### (a) NRW as a Percentage of Water Production

NRW as a percentage of water production has been improving over the period of three years. It has been decreasing from weighted average of 33.1% in FY 2016/17 to 26.8% in FY 2017/18 and eventually to 24% in FY 2018/19. Figure 50 gives a graphical illustration of NRW trend by the NP WSSAs during the past three years.



**Figure 50: Non-Revenue Water (as percentage of water production)**

Similar to FY 2017/18 KASHWASA has remained the only NP WSSA that has continued to comply with the service level benchmark of 20% by attaining a NRW of 8.8%. This has been contributed by timely repair of leaking pipes and pipefittings as well as pressure management.

Over the past three years HTM, Mugango – Kiabakari and Wanging'ombe WSSAs have been recording high NRW of more than 50% with Mugango – Kiabakari having the highest NRW. Generally, the key reasons for high NRW are deteriorating water infrastructure (pipes and fittings) and unauthorized water consumption (theft and illegal connections) plus technical and administrative inaccuracies associated with customers metering and billing.

**(b) NRW in cubic meter of water loss per km per day**

National Project WSSAs have shown uneven trend of the indicator. The average daily amount of water loss in a kilometer of distribution network improved from 5.8m<sup>3</sup> lost/km/day in FY 2016/17 to 4.0m<sup>3</sup> lost/km/day in FY 2017/18 and deteriorated to 4.2 m<sup>3</sup> lost/km/day in FY 2018/19 as presented in Appendix 3: Table A3.5 and illustrated in Figure 51.

**(c) NRW per connection per day**

NRW per connection in m<sup>3</sup>/day has shown an improving trend over the past three years. It has been decreasing from an average of 0.9m<sup>3</sup>/day in FY 2016/17 to an average of 0.6m<sup>3</sup>/day in FY 2017/18 and remained constant at 0.6m<sup>3</sup>/day in FY 2018/19.

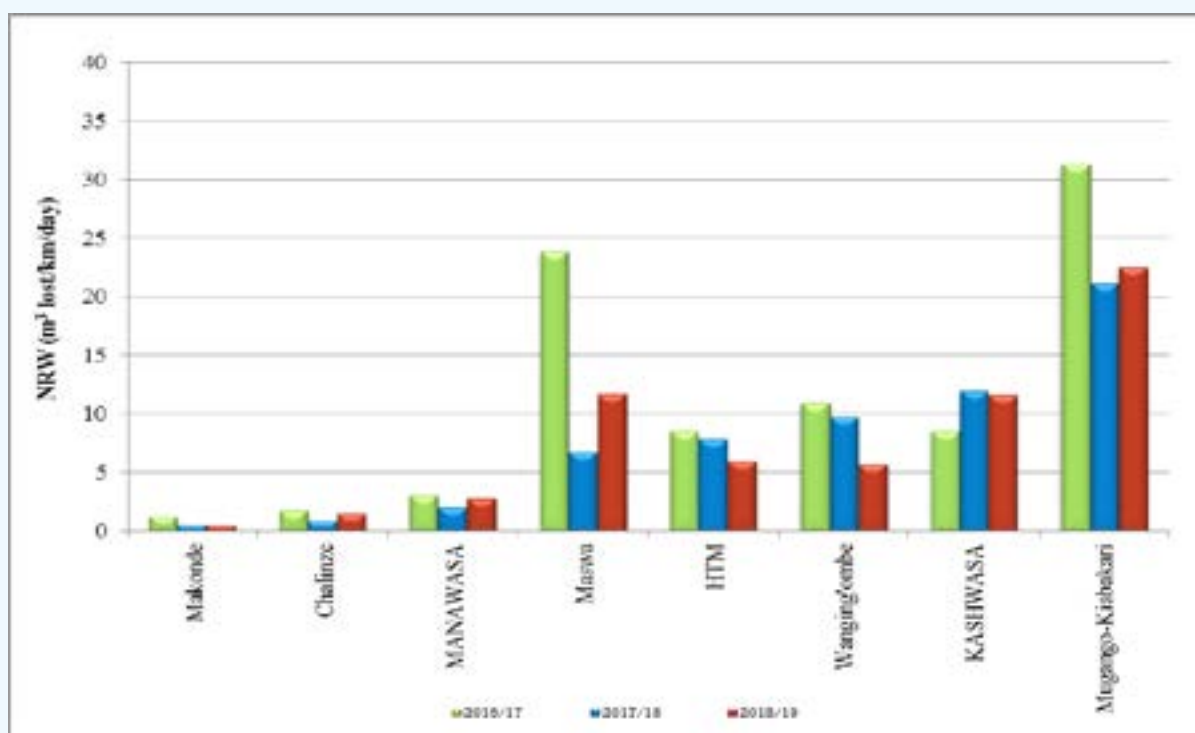
**Overall NRW performance**

The complexity of management of NRW increases with the number of connections as well as the length of water supply network. It is easier to control NRW for the network with short lengthed network and few connections than a network with longer lengthed network and high number of customer connections. The

Overall NRW in m<sup>3</sup>/km/connection for the past three years has been improving, it has decreased from 0.9 in FY 2016/17 to 0.6 in FY 2017/18 and remained constant at 0.6 in FY 2018/19. MANAWASA registered the lowest NRW of 100liters per connection per km. Meanwhile, KASHWASA has the lowest NRW of 8.8% in terms of the volume of water produced it has recorded the highest NRW of 50,352.9liters per connection per kilometer of network. Table 25 depict NRW per connection per km of individual WSSAs.

**Table 25: Overall NRW in m<sup>3</sup>/km/connection**

Utilities	NRW (m3 lost/km/day)		
	2016/17	2017/18	2018/19
Chalinze	1.8	0.9	1.6
HTM	8.6	7.9	6.0
KASHWASA	8.6	12.0	11.7
Makonde	1.3	0.5	0.6
MANAWASA	3.1	2.1	2.9
Maswa	23.9	6.8	11.7
Mugango-Kiabakari	31.3	21.1	22.5
Wanging'ombe	11.0	9.7	5.8
<b>AVERAGE</b>	<b>5.8</b>	<b>4.0</b>	<b>4.2</b>



**Figure 51: NRW in m<sup>3</sup> loss per km per day**

Makonde has maintained the lowest water loss per kilometer length of the distribution network per day for three consecutive years due to decrease in water production. Other NP WSSAs which reported less than 10m<sup>3</sup> water loss per kilometer length of the distribution network per day were MANAWASA, Chalinze and HTM WSSAs. Mugango-Kiabakari WSSA reported highest NRW per km per day (22.5m<sup>3</sup>/km/day).

## 7.9 Adequacy of Water Storage Capacities

The adequacy of the water storage capacities of the NP WSSAs was assessed in terms of the duration (in hours) at which the available water storage will satisfy the current daily water demand. It is recommended that the storage capacity should be able to satisfy the daily demand for at least 7 hours. The average storage capacities expressed in hours of storage for the NP WSSAs in FY 2018/19 was 18.9 hours decreased from 19.9 hours in FY 2017/18. The detailed trend on the storage capacities for the NP WSSAs is presented in Appendix 3: Table A3.3 and illustrated in Figure 52.

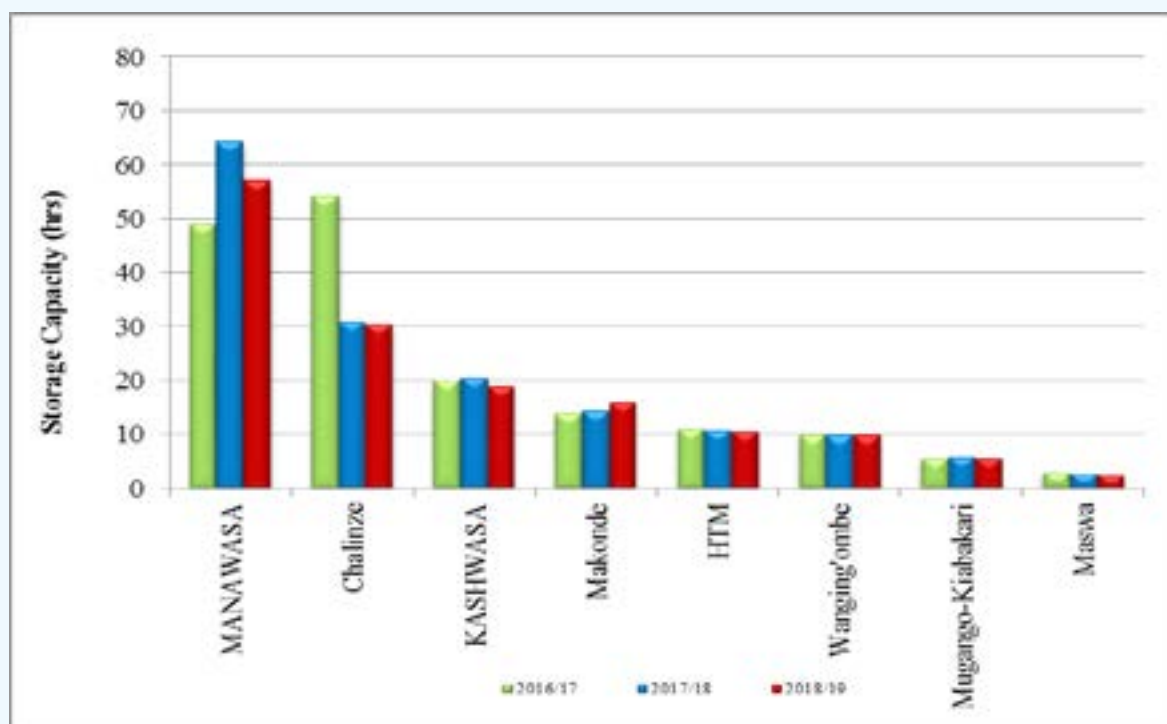


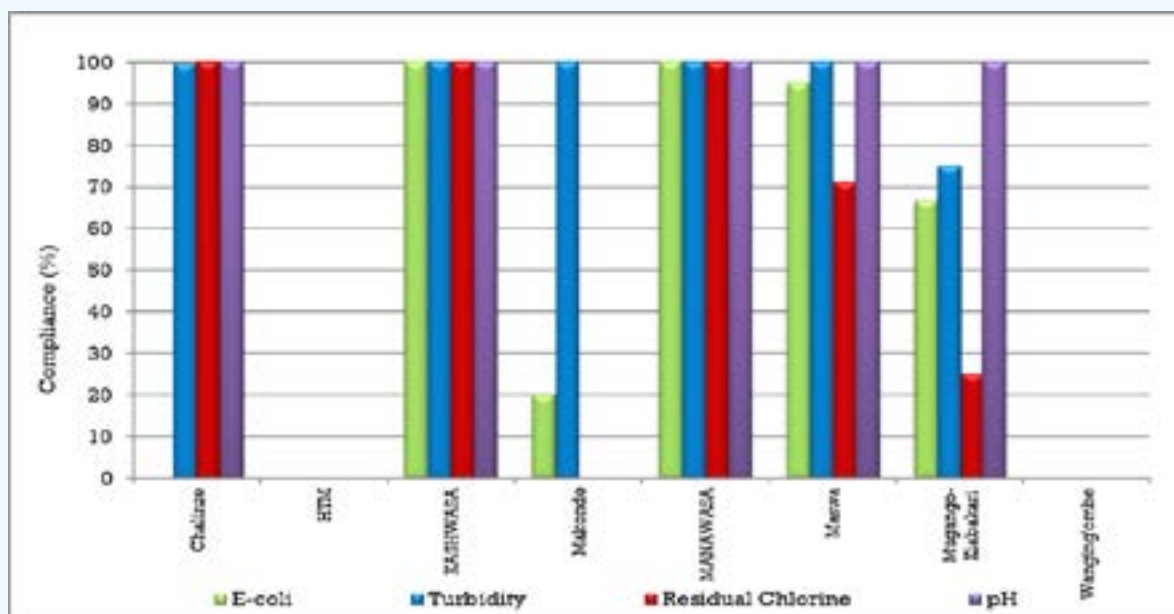
Figure 52: Storage Capacities

MANAWASA had achieved the highest storage capacity of 57 hours in FY 2018/19 being a decrease from 64 hours in FY 2017/18, while Maswa NP WSSA had the lowest storage capacity of 2.5 hours. Two out of eight utilities did not attain the minimum recommended storage capacity of 7 hours. These are Mugango Kiabakari and Maswa NP WSSAs.

## 7.10 Water Quality Monitoring

### Water Quality Monitoring Conducted by NP WSSAs

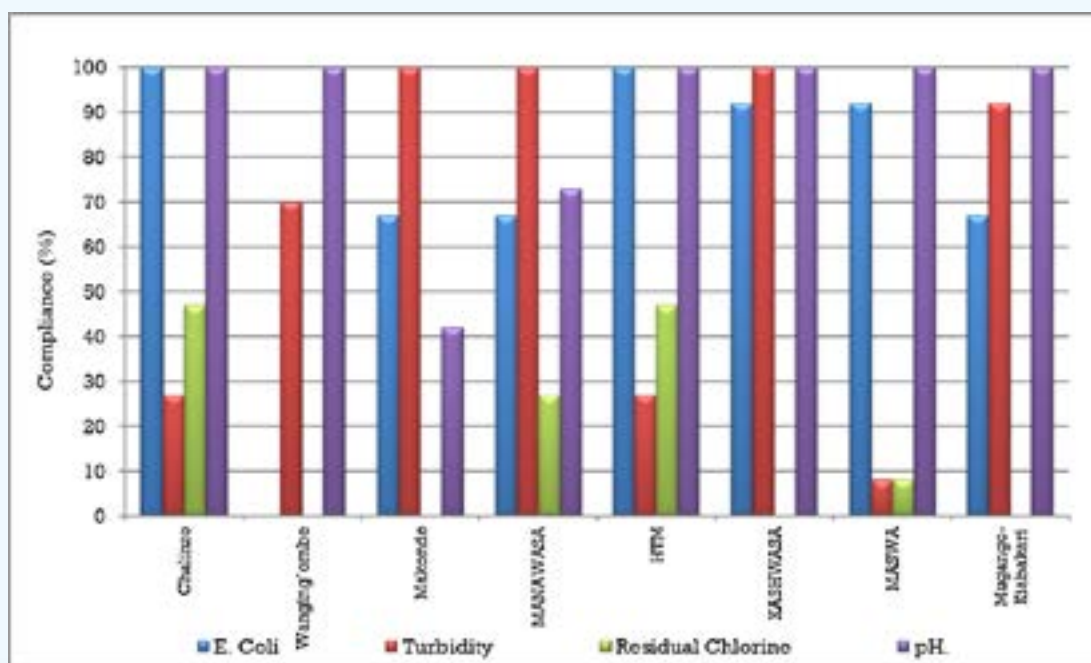
During the FY 2018/19, six out of eight National Project WSSAs conducted water quality tests and submitted the results to EWURA. The submitted results were analyzed and checked for compliance to TBS (TZS 789:2016-EAS 12:2014). The overall compliance on the tested parameters were; 66% for the residual chlorine 77.2% for pH, 63.6% for E-Coli and 95.8% for turbidity. The overall E. Coli compliance has improved from 69.4% in FY 2016/17 to 72.2% in FY 2017/18 and deteriorated to 60.28% in FY 2018/19. The turbidity, residual chlorine and pH overall compliance level have improved by 15%, 11% and 18% respectively in FY 2018/19 from 2016/17. Over the past three years NP WSSAs have not attained a service level benchmark, which requires 100% compliance for E. Coli and atleast 98% for other parameters. The percentage water quality compliance on the tested parameters on each WSSA were as shown on Figure 53.



**Figure 53: Water Quality Percentage Compliance Reported by NP WSSAs**

### Water Quality Monitoring Conducted by EWURA

During FY 2018/19, EWURA conducted water quality monitoring to all National project WSSAs. A total of 101 samples were collected and analysed for pH, Turbidity, E-Coli and Residual Chlorine. The monitoring findings revealed that, the overall compliance on the tested parameters was 89% for pH, 66% for turbidity, 73% for E-Coli and 16% for the residual chlorine. Generally, over the past three years the compliance level in terms of E. Coli and pH levels has experienced uneven trend with 88% in FY 2016/17, 70% in FY 2017/18 and 73% in FY 2018/19. The residual chlorine compliance has been continuously deteriorating from 43% in FY 2016/17 to 16% in FY 2018/19, Table A3.6 Appendix 3. The water quality compliance (%) on the tested parameters from each WSSA were as shown on Figure 54.



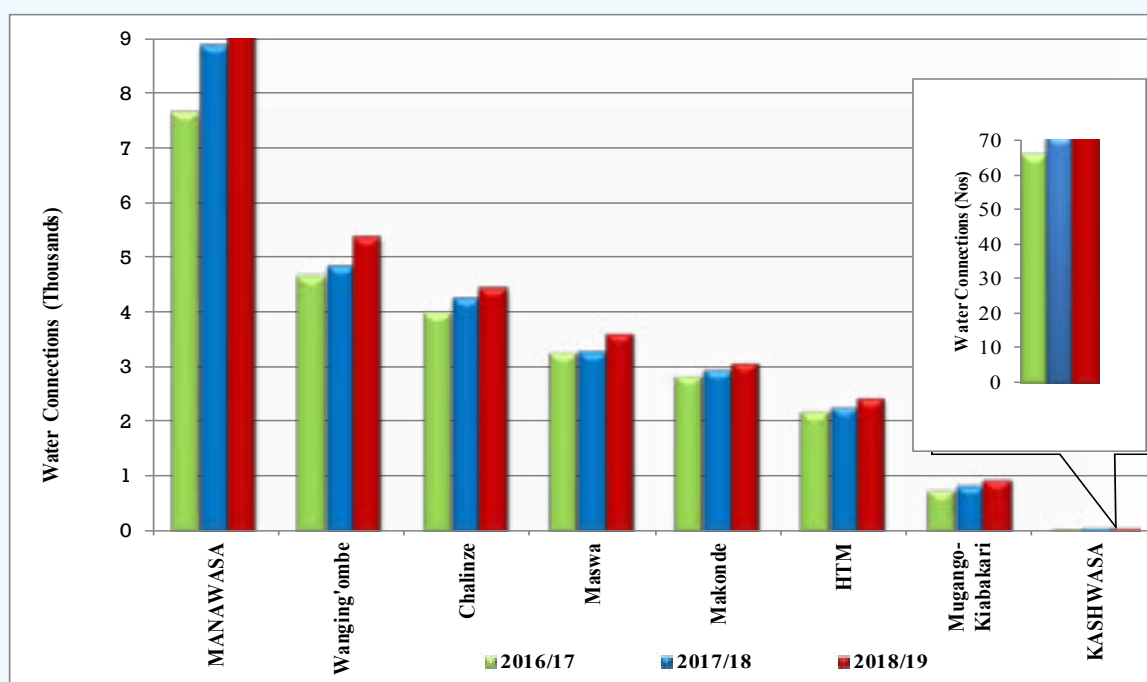
**Figure 54: Water Quality Percentage Compliance as conducted by EWURA**

## 8.0 BUSINESS AND COMMERCIAL OPERATIONS

The analysis of National Project WSSAs in terms of their business and commercial operations is based on selected performance indicators, which are water service coverage, metering ratio, water connections, complaints resolutions and revenue collection efficiency.

### 8.1 Total Water connections

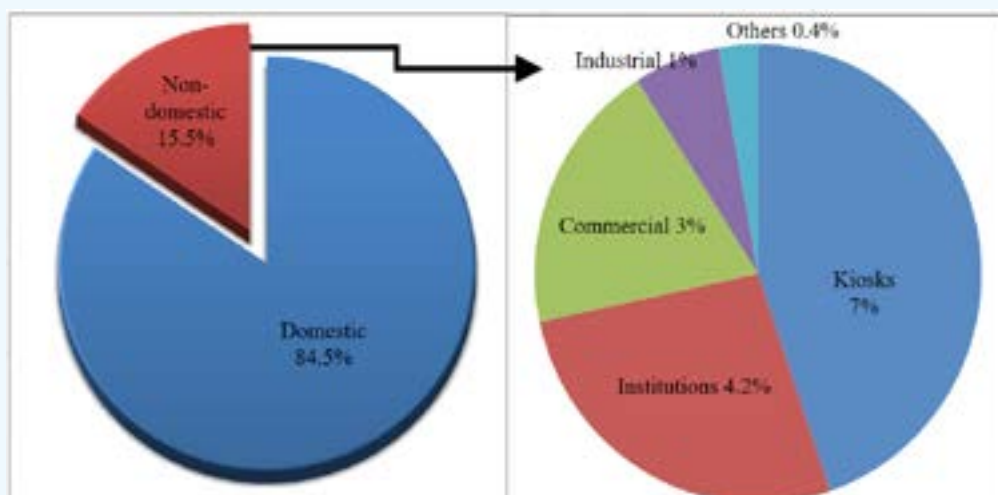
The NP WSSAs have shown continuous increase in total number of water connections from 25,367 in FY 2016/17 to 27,369 in FY 2017/18 (an increase of 8%) and thereafter to 30,054 in the FY 2018/19, (an increase of 10%). Figure 55 and Appendix 3-Table A3.7 indicate water connections trend for NP WSSAs.



**Figure 55: Three-Year Trend for Total Water Connections**

All NP WSSAs reported increase in the number of water connections with Mugango Kiabakari, Wanging'ombe and MANAWASA NP WSSAs having a more than 10% increase in number of water connections due to extension of water supply network.

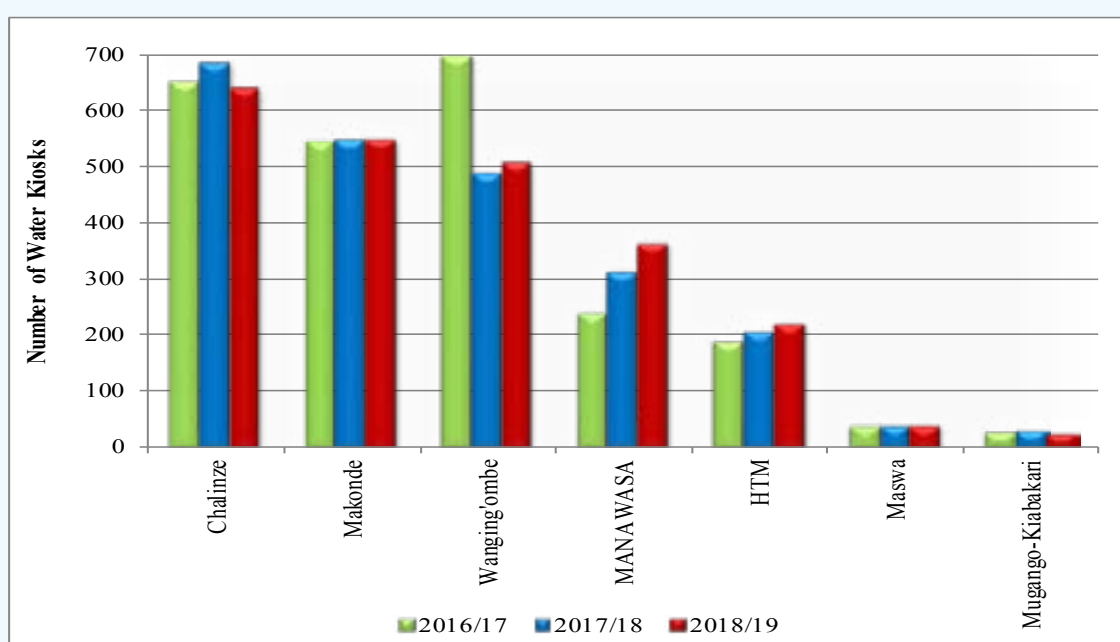
The customers in NP WSSAs are categorized as indicated in Figure 56. Most of the customers are in the category of domestic, which comprise of 84.5% of the total water connections.



**Figure 56: Categories of Water Supply Customers in NP WSSAs**

## 8.2 Water Kiosk Connections

Total number of working water kiosks for NP WSSAs decreased from 2,399 in FY 2016/17 to 2,321 in FY 2017/18 and thereafter increased to 2,356 in FY 2018/19. Figure 57 shows a three years' trend in the number of water kiosks while details of the same are in Appendix 3 Table A3.7.

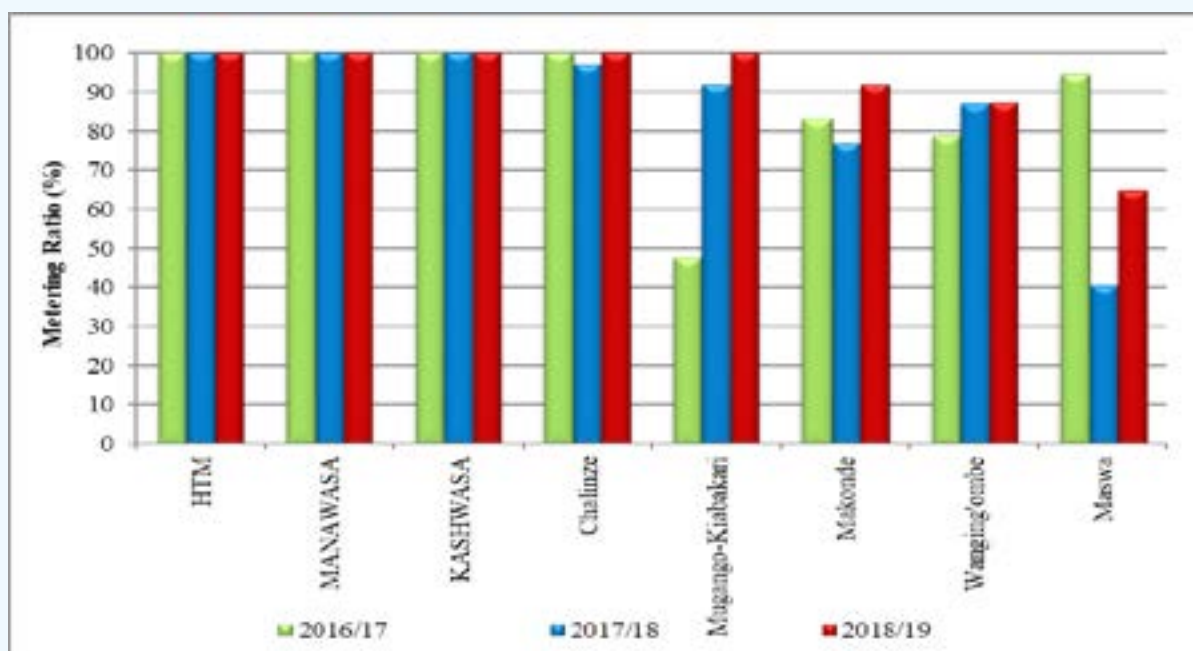


**Figure 57: Water Kiosk Connections**

Chalinze NP WSSA had the highest number of water kiosks while Mugango - Kiabakari WSSA had the lowest. The number of water kiosks increased significantly (52%) for MANAWASA due to improved water service coverage to customers in the rural areas followed by Wanging'ombe NP WSSA with 19% increase in the number of water kiosk due to expansion of services to villages. KASHWASA was not included in the assessment to this indicator since it does not operate water kiosks.

### 8.3 Metering Ratio

During FY 2018/19 NP WSSAs achieved 98% Metering ratio compared to 82% achieved in FY 2017/18 and 79.4% in FY 2016/17. Table A3.8 in Appendix 3, and Figure 58 illustrate metering ratio.



**Figure 58: Metering Ratio**

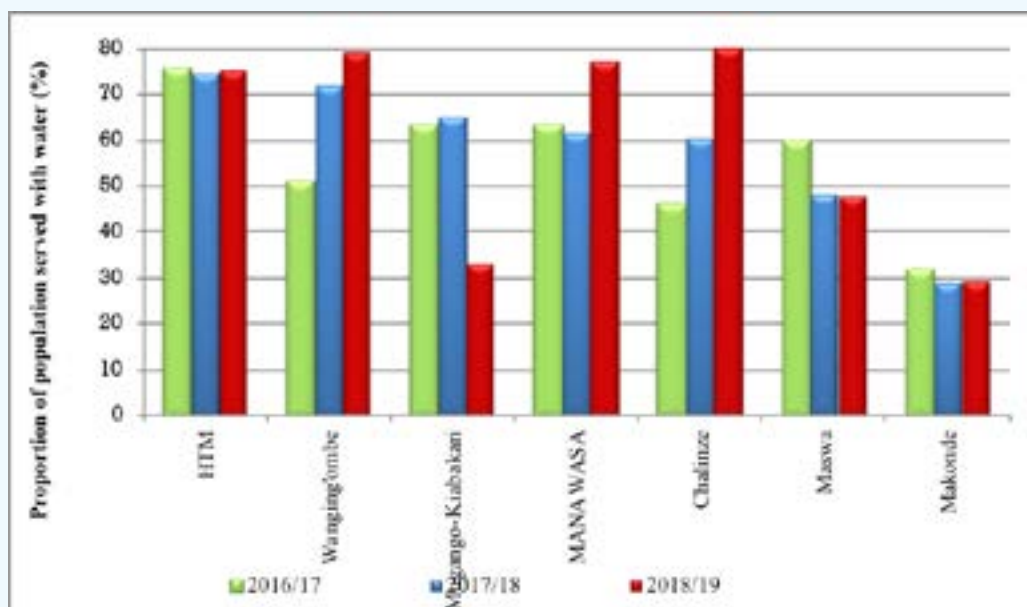
Chalinze and Mugango- Kiabakari NP WSSAs attained 100% metering ratio during the period under review. KASHWASA, HTM and MANAWASA continued to maintain 100% metering ratio. Maswa and Makonde NP WSSAs significantly increased metering ratio by 24% and 15% respectively.

### 8.4 Water Service Coverage

Population living in area with water network and population directly served were used to outline the performance of NP WSSAs in terms of water service coverage. The analysis of water service coverage excludes KASHWASA that is a bulk water supplier.

#### Proportion of Population Directly Served with Water

For NP WSSAs, the proportion of population directly served with water has shown an improving trend. It has increased to 60.2% in FY 2018/19 as compared to 55% in FY 2017/18 and 52% reported in FY 2016/17, being a result of water network extension projects implemented by NP WSSAs (see Figure 59 and Appendix 3: Table A3.9).

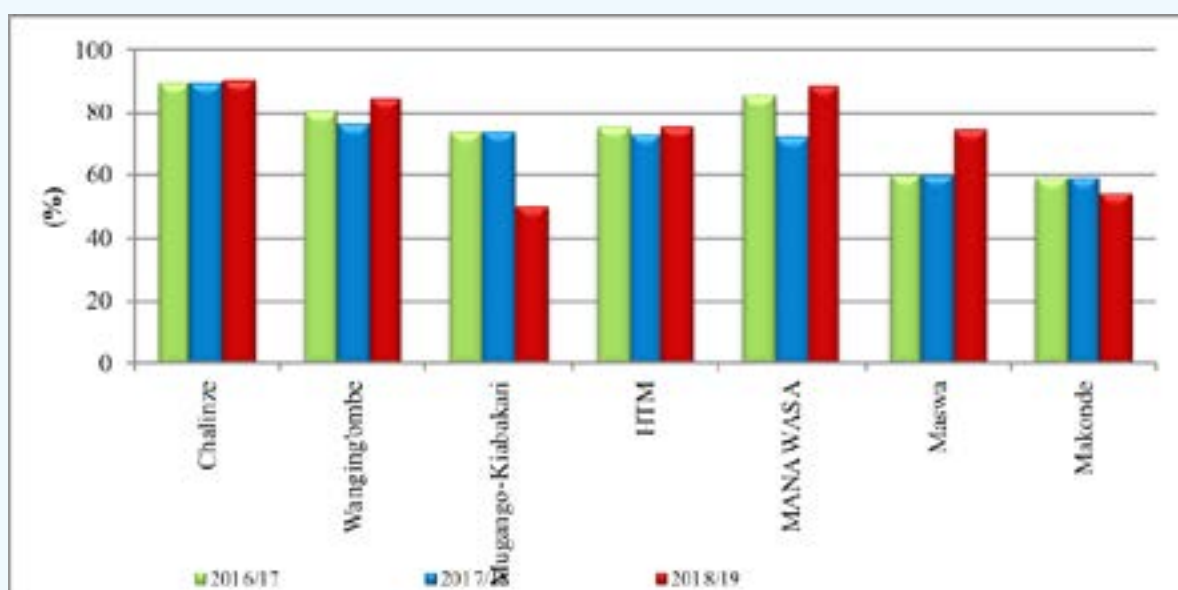


**Figure 59: Proportion of population directly served with water**

Chalinze, Wangingombe and MANAWASA had the highest proportion of population directly served with water while Makonde had the lowest. Further, Chalinze WSSAs and MANAWASA had the highest increase of population directly served which was 20% and 16% respectively. The increase noted in Chalinze WSSA is attributed to extension of water supply network and consequently, increase in number of water connections.

#### **Proportion of Population Living in Area with Water Network**

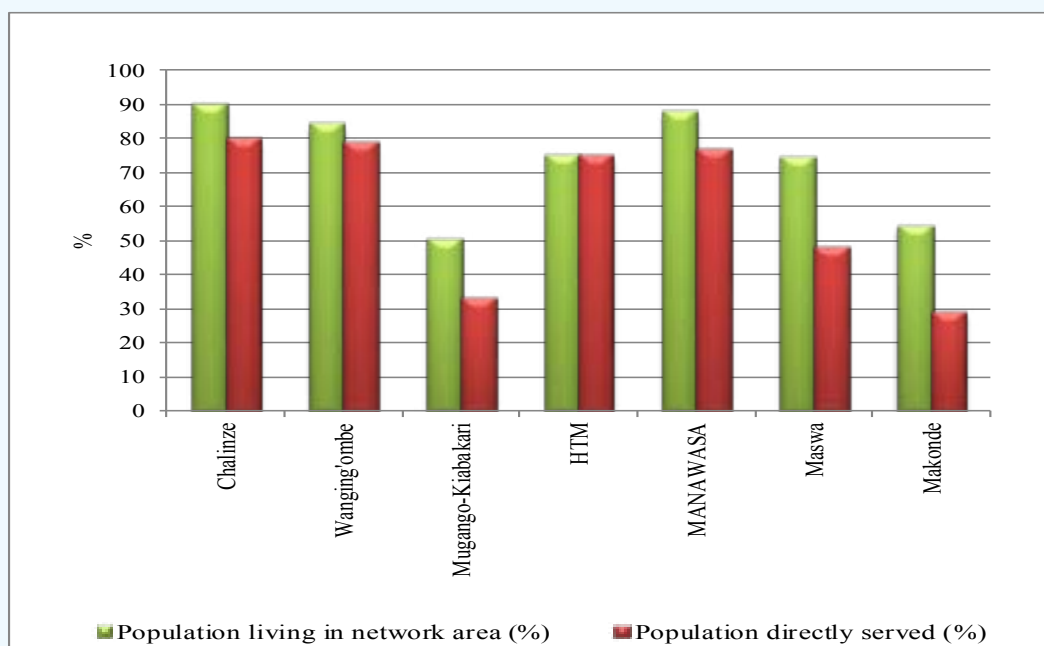
NP WSSAs' overall average of the proportion of population living in areas with water shows a decreasing trend from 74% in FY 2016/17, 72% in FY 2017/18 and 71% in FY 2018/19 (See Appendix 3 Table A3.9 and Figure 60). The deterioration of the indicator is linked to reported decrease by Mugango- Kiabakari WSSA.



**Figure 60: Proportion of population living in area with water network**

Chalinze WSSA is the only utility that has reported above 90% of the total population living in its service area covered by water network while Mugango Kiabakari WSSA has 33% which is the lowest among the NP WSSAs.

A comparison of the two service coverage indicators discussed above reveal the available potential for water utilities to increase their customer base and consequently serve more people directly in their designated service areas. A graphical presentation of the two indicators is provided in Figure 61.

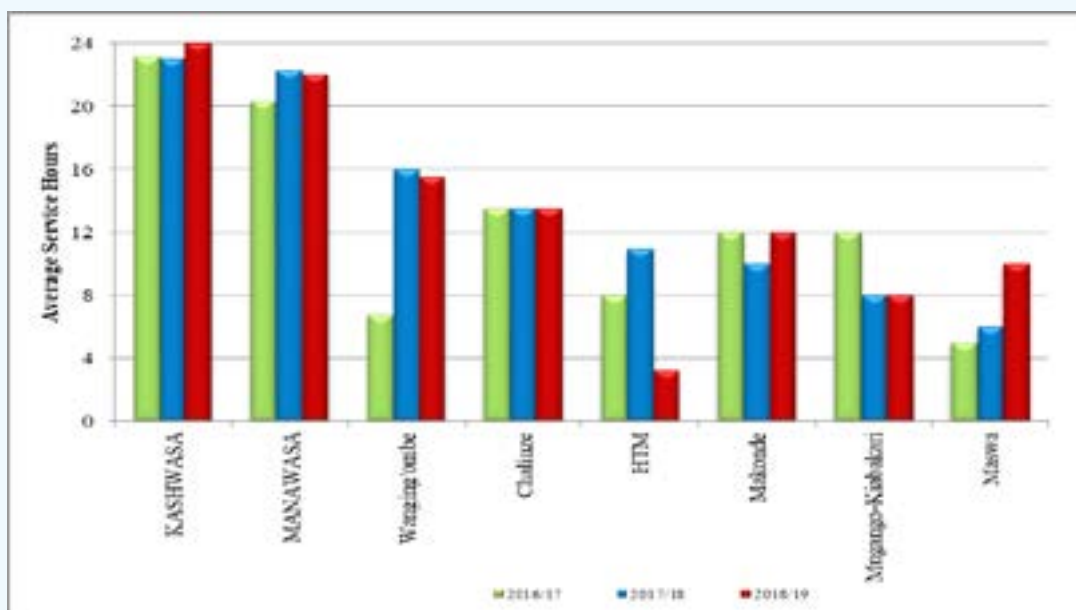


**Figure 61: Comparison of proportions of population living in area with water network and population served with water**

Except for HTM WSSA, the remaining NP WSSA have not managed to connect all the population that live in the area of the water network. This implies that Chalinze, Wanging'ombe, Makonde, MANAWASA, Mugango and Maswa WSSAs have a potential of improving population served with water in their service area as well as increase revenue base using their existing networks.-

### 8.5 Average Service Hours

For National Project WSSAs, average hours of services remained 13hours for FY2018/19 and FY 2017/18 from 12hours in FY 2016/17. The proportion of population with 24 hours of service has decreased to 18% in FY 2018/19 as compared to 20% in 2017/18. The proportion of population with 24 hours of servicewas 16% inFY 2016/17. Figure 62 and Appendix 3 – Table A3.10 gives a detailed overview of average service hours.



**Figure 62: The average service hours**

As per Figure 62, KASHWASA and MANAWASA reported an average daily service hours above 20 while HTM WSSA had an average of 3 hours of water service per day.

### 8.6 Staff Adequacy and Qualifications

Performance of WSSAs is greatly influenced by availability and qualification of the required staff. National Project WSSAs are negatively affected by unavailability in number and qualification of required staff. Status of Staff in terms of number and qualification is presented in Table 26.

**Table 26: Staff Adequacy and Qualifications**

S/No	UTILITY	TOTAL STAFF ESTABLISHMENT (No)	AVAILABLE STAFF (No)	DEFICIT (No)	REMARKS
1	Makonde WSSA	91	70	19	Vacant staff are Mechanical, and Eletrical expertise in the level of Engineer and Technicians
2	MANAWASA	88	73	15	Vacant staff Engineers 2, Data base and Programing Officer, Credit Control Officer, Head of Zones 2, Drivers 2, Records Management Officer, and Assistant Technician 6.
3	Chalinze WSSA	179	135	44	Need Accounting officers, Electro-Mechanical, Water technicians, Plumbers, Meter readers, ICT technicians drivers and Human resource personel
4	KASHWASA	90	71	19	The utility lacks Commercial manager, Head of Procurement Unit, Water Production Engineer, Water Transmission Engineer, Assistant water laboratory technician

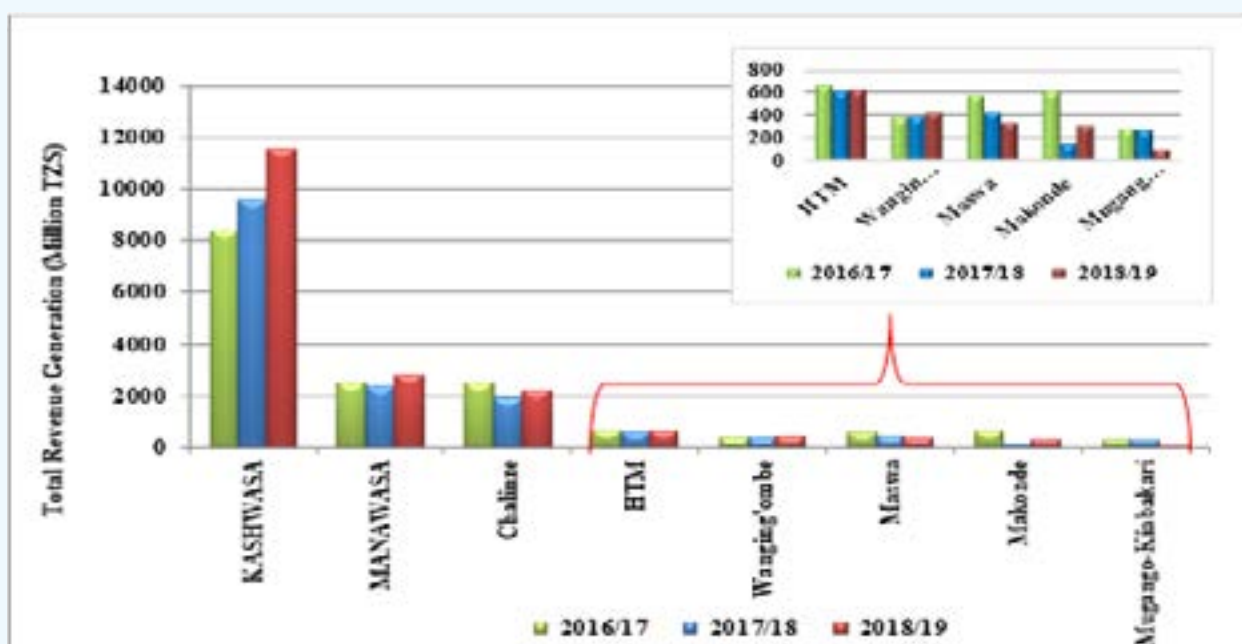
S/No	UTILITY	TOTAL STAFF ESTABLISHMENT (No)	AVAILABLE STAFF (No)	DEFICITY (No)	REMARKS
5	Maswa WSSA	34	9	25	The utility needs to employ Human Resource Manager, Internal Auditor, Procurement Officer, Commercial Manager, Public Relation Officer and Laboratory Technicians
6	Mugango – Kiabakari WSSA	52	17	35	The utility needs to employ Human Resource Manager, Internal Auditor, Procurement Officer, Accountant, Commercial Manager, Public Relation Officer and Water and laboratory Technicians
7	HTM WSSA	75	80		All positions are filled. However, most of the staff lack the required skills to meet their job requirements.
8	Wanging'ombe WSSA	75	52	23	The Utility require 1 office attendant, 3 drivers, 1 gardener, 2 pre audit officers, 1 accountant, 2 cashiers, 5 meter readers, 5 Technicians(civil/building/ water and sanitation engineering), 1 storekeeper, 1 assistant internal Auditor, 1 legal officer and 1 public relation officer
<b>TOTAL</b>		671	505	169	

HTM is the only WSSA that has adequate staff, while Chalinze WSSA is the most affected by staff inadequacy among the NP WSSAs by having 44 vacant positions equivalent to 24.4% of the staff establishment. The most affected qualifications are Electrical engineering, Mechanical engineering, Electro-Mechanical engineering, Accountancy and Human Resources professions.

## 9.0 FINANCIAL OPERATIONS

### 9.1 Revenue Generation

The overall revenue generation indicated irregular trend from FY 2016/17 to FY 2018/19 whereby in FY 2017/18 there was a slight decrease of 1.8% and then an increase of 17.4% in FY 2018/19. Only KASHWASA recorded increasing trend during the period under review. Figure 63 depicts revenue generation during the review period for NP WSSAs.



**Figure 63: Total Revenue Generation for NP WSSAs (In Million TZS)**

NP WSSAs that reported major increase in revenue included KASHWASA (21.5%), MANAWASA (18%) and Chalinze (14.2%). The increase was mainly associated with either increase in billed volume and/or increase in tariff. On contrary, revenue from Maswa and Mugango Kiabakari WSSAs decreased by 21% and 66.6% respectively. The reasons thereof contributed by reduction of water production by 72% and 32% for Maswa and Mugango Kibakari WSSAs respectively. Also, NRW for Mugango Kiabakari increased from 80.34% in 2017/18 to 85.69% which contributed to a drop in revenue.

### 9.2 Revenue Collection Performance

Performance in revenue collection is critical for ensuring sustainability of WSSA in terms of quality and reliable service provision. To determine whether the WSSA is performing well in collecting revenue, four major factors were analysed i.e. collection efficiency, accounts receivable collection period and overall efficiency indicator.

#### 9.2.1 Revenue Collection Efficiency

The overall revenue collection efficiency improved from 73.70% in FY 2016/17 and 75.57% in FY 2017/18 to 83.6% in FY 2018/19. KASHWASA, MANAWASA, Mugango Kiabakari and Maswa WSSAs recorded increasing trend during the period under review. On other hand, the efficiency of HTM and Makonde WSSAs dropped. In FY 2018/19 only KASHWASA achieved a service level benchmarking of > than 95% save for MANAWASA who included arrears in the revenue collection of FY 2018/19.

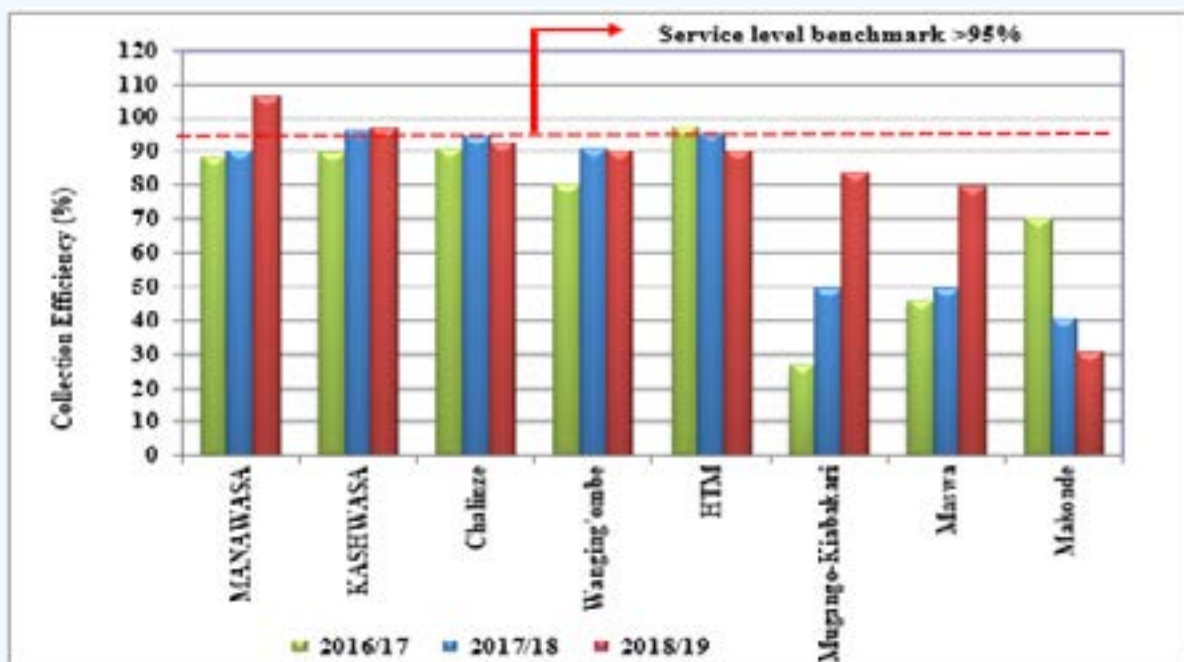


Figure 64: Revenue Collection Efficiency for NP WSSAs

### 9.2.2 Accounts Receivable Collection Period

During the period under review, the overall accounts receivable collection period showed uneven trend of 24.5 months in FY 2016/17, 53.2 months in FY 2017/18 and nine months in FY 2018/19. In FY 2018/19 all NP WSSAs improved collection period compared to the performance of FY 2017/18 whereby 6 NP WSSAs reported worsened collection periods. Nevertheless, none of the NP WSSAs managed to reach a target of 2 months which is regarded as a best practice. Figure 65 shows accounts receivable collection periods for NP WSSA for FY 2016/17 to FY 2018/19.

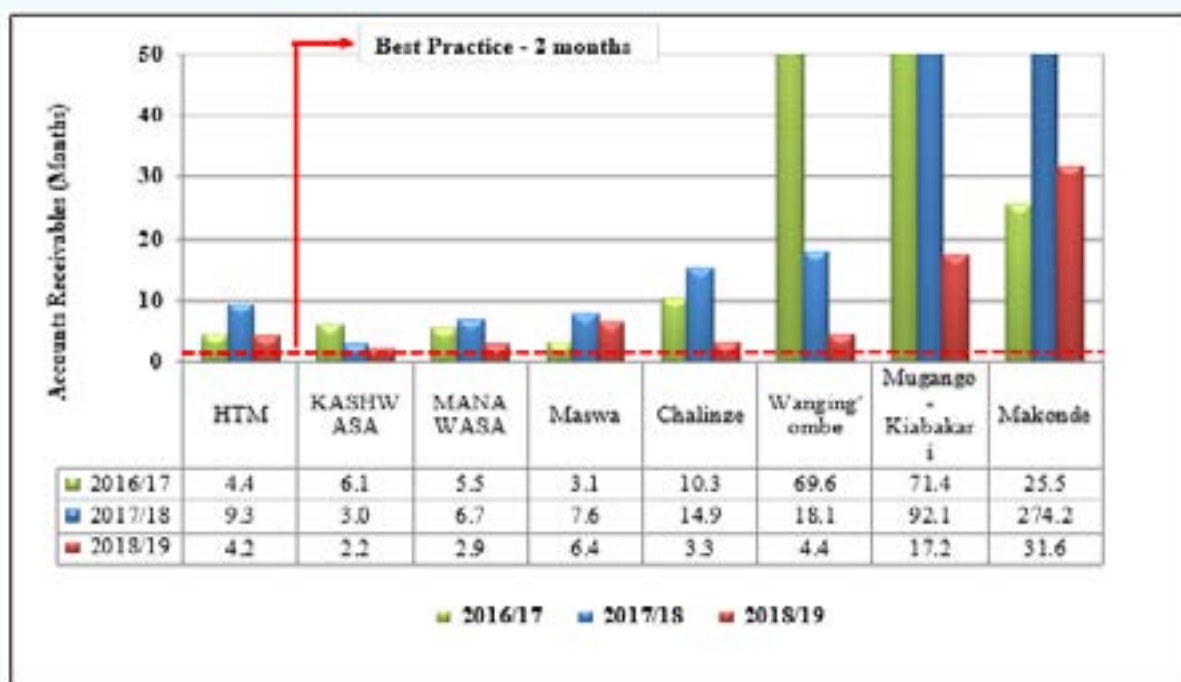


Figure 65: Accounts Receivable Collection Periods For NP WSSAs

### 9.2.3 Overall Efficiency Indicator (OEI)

For the period of FY 2016/17 to 2018/19, the average OEI indicated improving trend from 37.6% in 2016/17 and 39.7% in 2017/18 to 47.3% in 2018/19. In FY 2018/19 the OEI improved by 19% compared with the improvement recorded in FY 2017/18 of 5.7%. KASHWASA continues to lead under this indicator due to low NRW and high revenue collection efficiency. On the other hand, OEI for HTM, Mugango Kiabakari and Wanging'ombe WSSAs deteriorated due to high NRW. Figure 66 presents OIEs for NP WSSAs during the period of review.

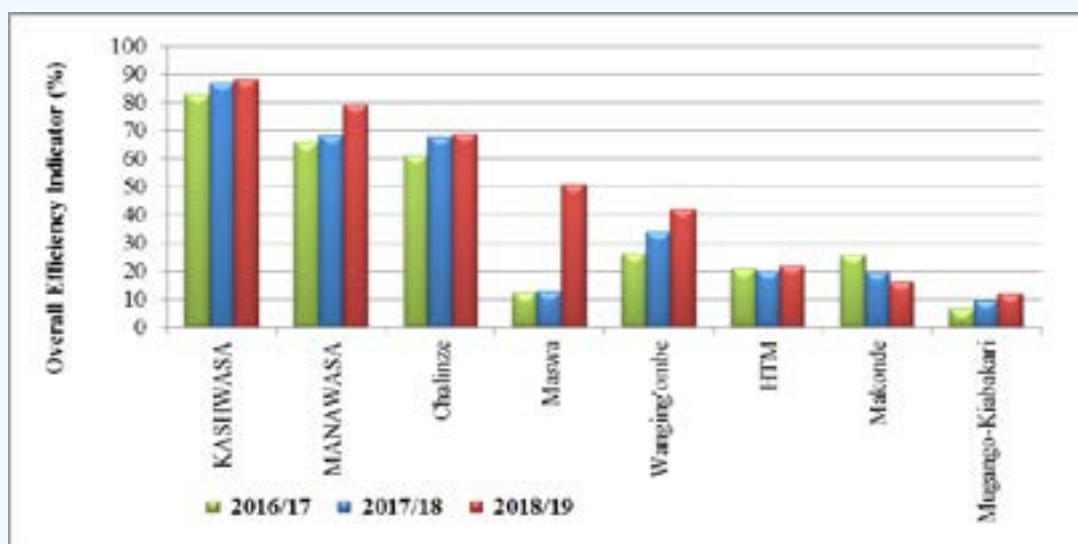


Figure 66: Overall Efficiency Indicator (OEI) for NP WSSAs

## 9.3 Expenditure Control

### 9.3.1 Operating cost per Unit of Water Produced

The general operating cost (excluding depreciation) per unit of water produced displayed irregular trend, cost increased by 1% from FY 2016/17 to FY 2018/19. In FY 2018/19, unit cost decreased by 8.8% from TZS 1,278.8/m<sup>3</sup> in FY 2017/18 to TZS 1,166/m<sup>3</sup>. A decrease in FY 2018/19 was contributed by an average reduction in operating costs by 6% and an increase in water production by 7%. Figure 67 indicates operating unit cost for NP WSSAs for the period of FY 2016/17 to FY 2018/19.

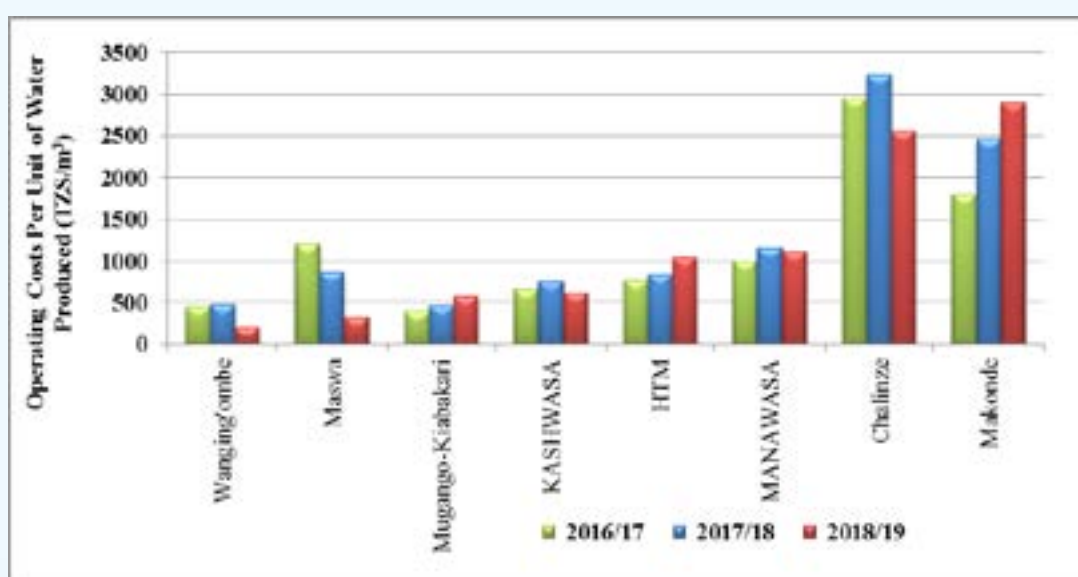


Figure 67: Operating cost per Unit of Water Produced for NP WSSAs

Despite the general decrease in unit cost, HTM, Makonde and Mugango-Kiabakari WSSAs recorded an increase in unit costs by 20%, 50% and 25% respectively due to a decrease in water production.

### 9.3.2 Energy Cost Per Unit of Water Produced

The unit cost of energy showed an uneven trend during the period under review, unit cost increased by 38% from TZS 389/m<sup>3</sup> in FY 2016/17 to TZS 536.5/m<sup>3</sup> in FY 2017/18 and then dropped by 3% to TZS 520.4/m<sup>3</sup> in FY 2018/19. A decrease in FY 2018/19 is associated with a significant fall in unit cost for Maswa WSSA by 71.5% due to reported increase in water production by 265%. In FY 2018/19, KASHWASA, Makonde and Maswa WSSAs showed improved efficiency in energy use. Apart from increase in water production the energy cost per unit for these utilities decreased and service hours increased. Figure 68 displays unit cost of energy for 7 NP WSSAs instead of 8 WSSAs (absence of data for Wanging'ombe) for the period under review.

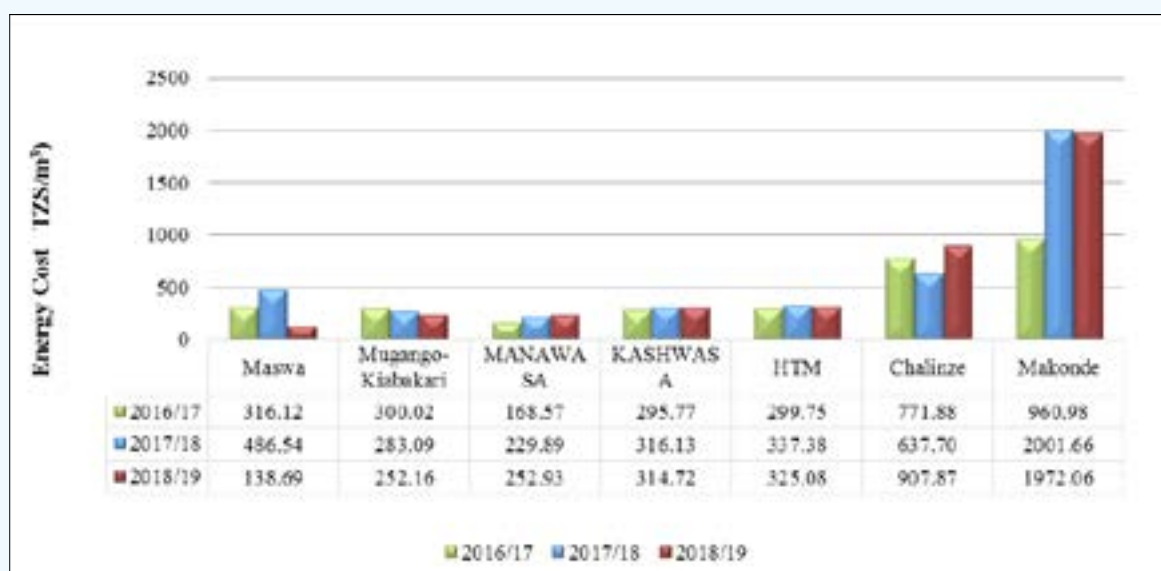
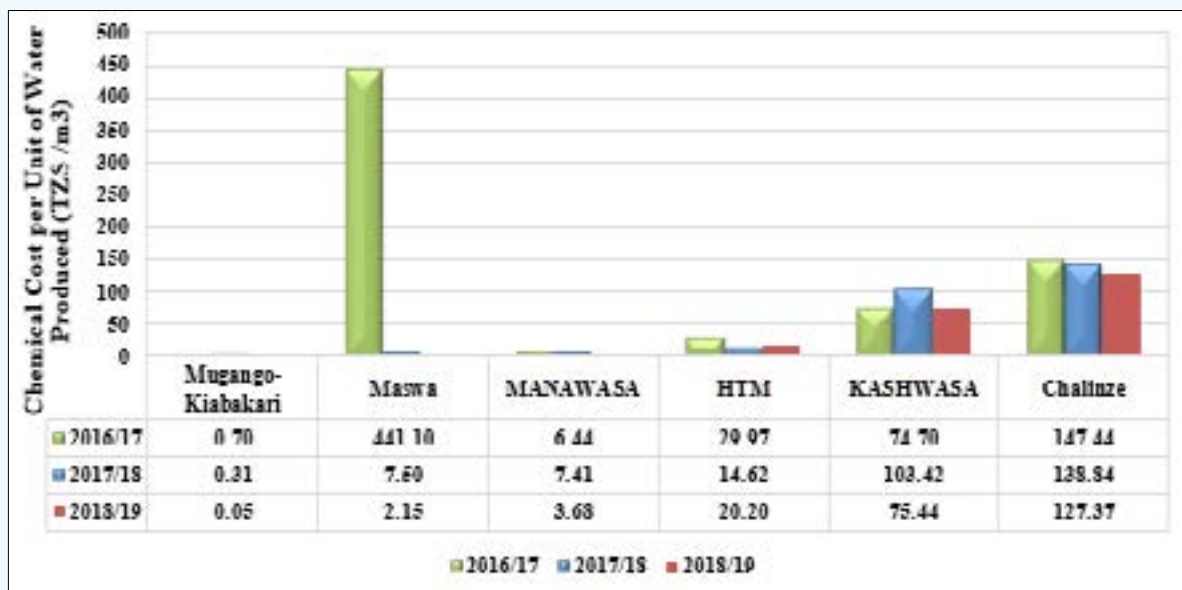


Figure 68: Energy Cost Per Unit of Water Produced for NP WSSAs

### 9.3.3 Chemical Costs per Unit of Water Produced

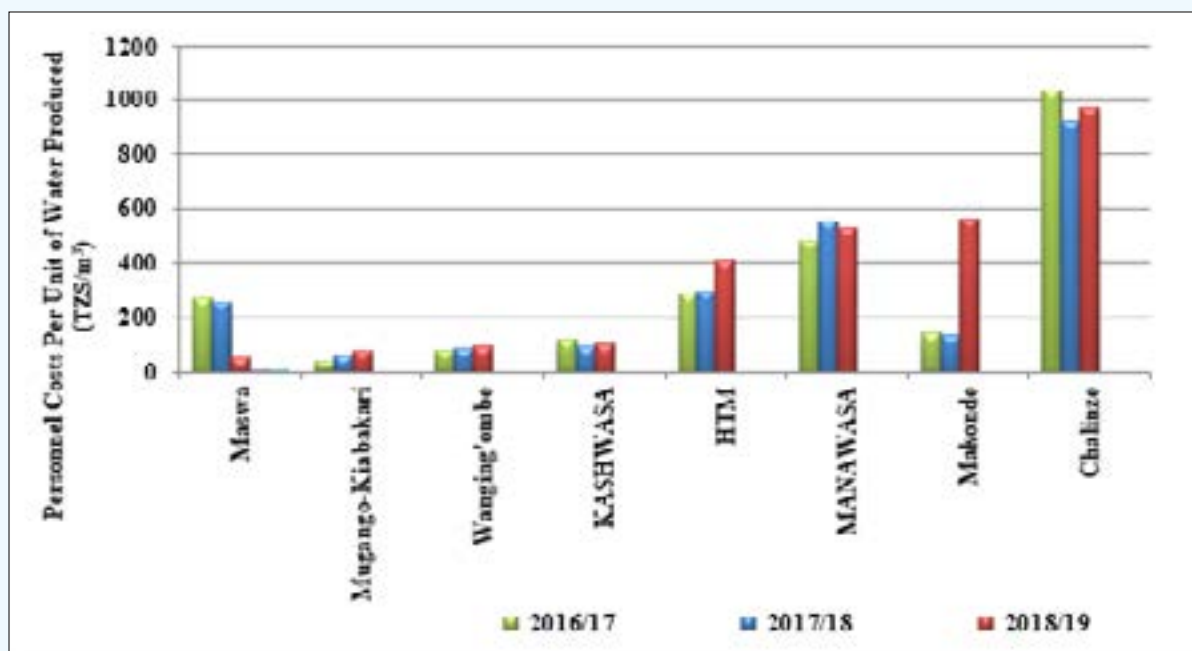
In the review period, an average unit cost continued to fall by 67.7% and 15.9% from TZS 88.4/m<sup>3</sup> in 2016/17 and TZS 34/m<sup>3</sup> in 2017/18 to TZS 28.6/ m<sup>3</sup> in 2018/19 respectively. Figure 69 indicates unit cost of chemical for 6 WSSAs that reported chemical costs for all three years. All NP WSSAs save for HTM WSSA, reported a decrease in unit cost of chemical in FY 2018/19.



**Figure 69: Chemical Costs per Cubic Meter for NP WSSAs**

### 9.3.4 Personnel Cost Per Unit of Water Produced

Average personnel cost per unit continued to rise from TZS 309.5/m<sup>3</sup> in FY 2016/17 and TZS 297.5/m<sup>3</sup> in FY 2017/18 to TZS 348.8/m<sup>3</sup> in FY 2018/19. As shown in Figure 70, the unit cost varied widely among WSSAs, the highest unit cost was recorded by Chalinze (TZS 972.9/m<sup>3</sup>), Makonde (TZS 563.9/m<sup>3</sup>) and MANAWASA (TZS 529.3/m<sup>3</sup>).



**Figure 70: Personnel Costs per cubic Metre of Water Produced for NP WSSAs**

While other WSSAs revealed a relatively small change in unit cost compared to previous years, Makonde recorded a significant increase in unit cost of TZS 563.9/ m<sup>3</sup> in 2018/19 compared with TZS130.3/ m<sup>3</sup> in FY 2017/18 and TZS 139.7/ m<sup>3</sup> in FY 2016/17. On the other hand, in FY 2018/19, Maswa WSSA reported a huge drop in unit cost by 80% from TZS 268.5 /m<sup>3</sup> in FY 2016/17 and TZS 252.5 /m<sup>3</sup> in FY 2017/18 to TZS 50.9 /m<sup>3</sup>. The

main reason for an increase in unit cost for Makonde was an increase in salaries by 119% while a decrease in unit cost for Maswa WSSA was due to a reduction in salaries by 49%.

### 9.3.5 Personnel Costs as a Percentage of Revenue Collections

Personnel cost as a percentage of revenue collection displayed irregular trend for the period under review, the overall percentage cost decreased from 89.7% recorded in FY 2016/17 to 59.3% in FY 2017/18 and then increased to 110.3% in FY 2018/19. The best practice requires personnel expenditure as a percentage of revenue collection from water and sewerage services to not exceed 30%. KASHWASA continues to be the best performer with the ratio below 30% for three years consecutively. The performance of NP WSSAs for the period under review is provided in Figure 71

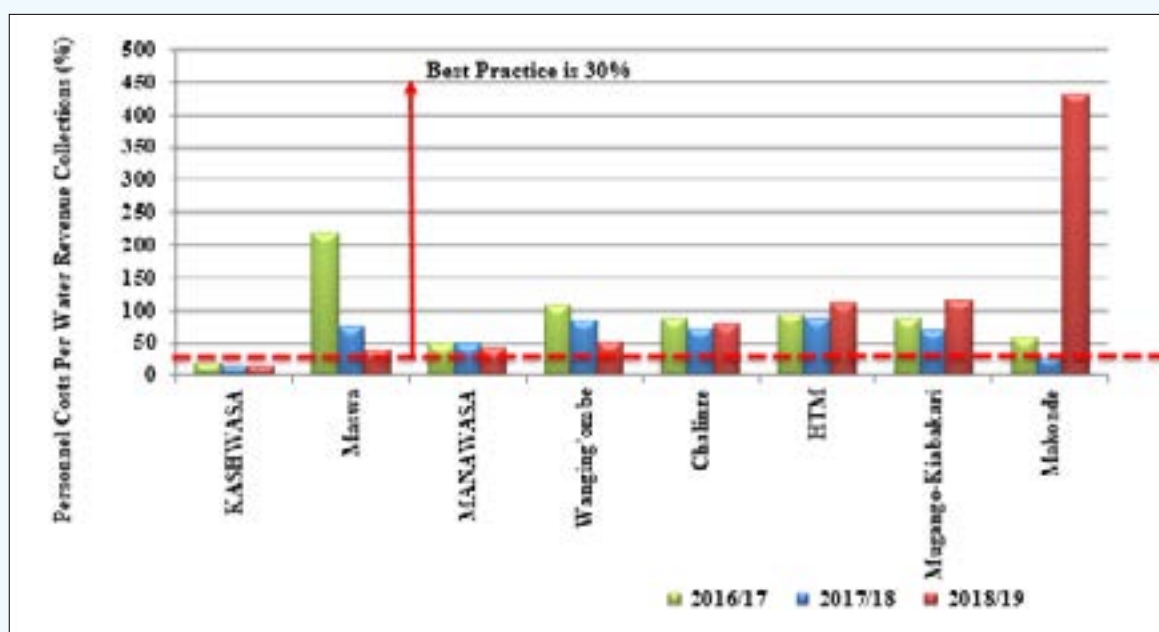


Figure 71: Personnel Costs as a percentage of Revenue collections for NP WSSAs

Makonde, Mugango Kiabakari and HTM WSSAs recorded high ratios due to the major reasons provided in table 27.

Table 27 :Reasons for Increasing Personnel Expenditure as a Percentage of Revenue Collections

SNo.	WSSA	Reasons
1.	Makonde	Increase in personnel cost by 450% and decrease in revenue collection by 25%.
2.	Mugango Kiabakari	Increase in personnel cost by 27% and increase in NRW from 80.34% in 2017/18 to 85.69% in 2018/19 consequently reduced revenue collection by 22%
3.	HTM	Decrease in revenue collection by 15%

### 9.3.6 Administrative Costs Per Cubic Meter of Water Produced

During the period under review, the average unit cost was TZS 163.5/m<sup>3</sup> in FY 2016/17, it rose to TZS 370/m<sup>3</sup> in FY 2017/18 and then dropped to TZS 162.7/m<sup>3</sup> in FY 2018/19. The performance in FY 2018/19 contributed largely by reduction of unit cost by Makonde (84.8%), KASHWASA (64.6%) and Chalinze (32%). Figure 72 shows the performance of the NP WSSAs for the period of 2016/17 to 2018/19.

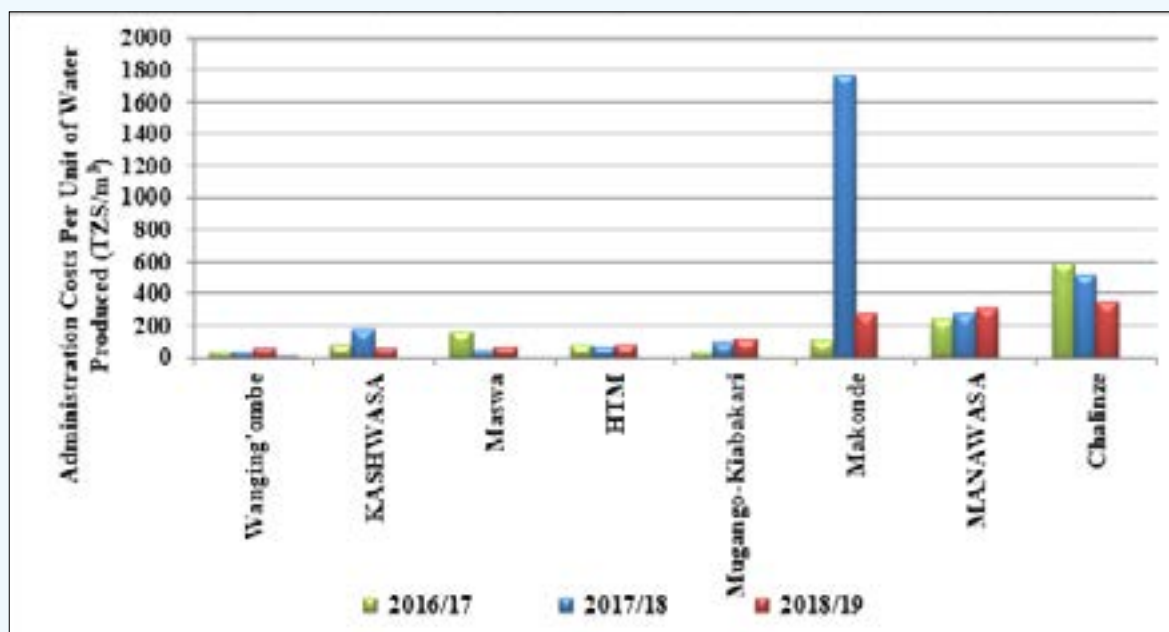


Figure 72: Administration Costs per cubic Metre of Water Produced for NP WSSAs

## 9.4 Cost Structure

### 9.4.1 Composition of O&M Costs (Excluding Depreciation)

This section indicates disaggregate of costs into three main categories: (i) Personnel; (ii) administration and (iii) Production, Distribution and Maintenance & Repair. As shown in Figure 73 in general, 52% of the costs was attributable to production, distribution, maintenance and repair, 29% personnel costs and 17% was administration costs. Table A3.14 Appendix 3 details cost composition for each NP WSSA.

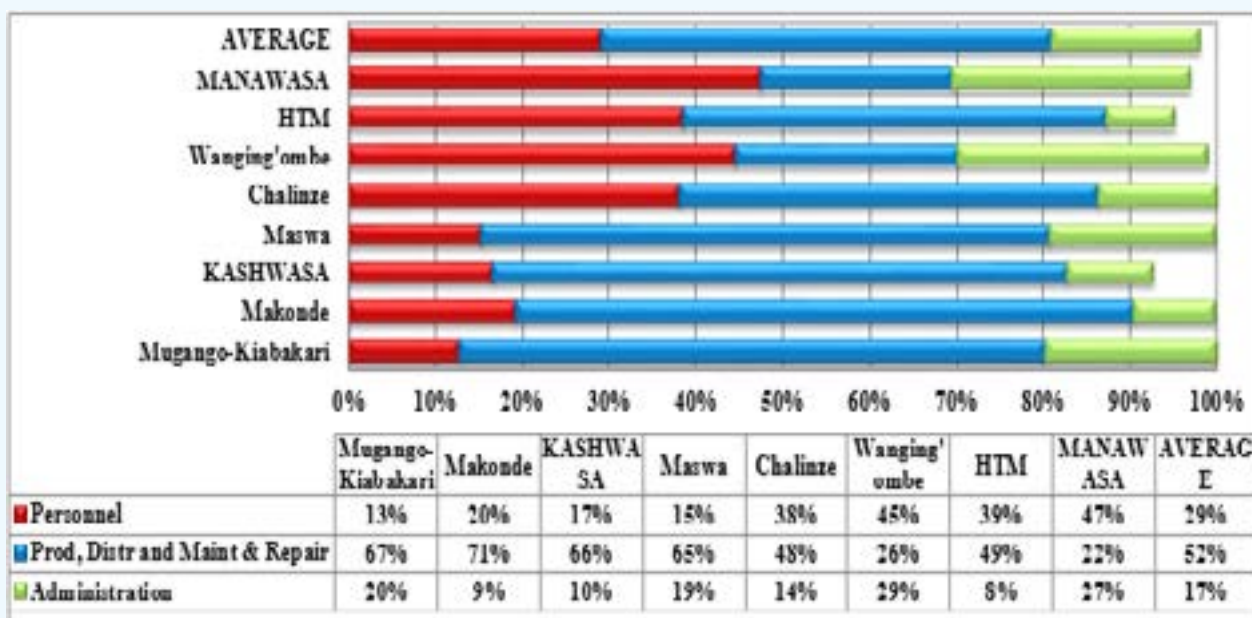


Figure 73: Composition of O&M Cost Excluding Depreciation for NP WSSAs

### 9.4.2 Depreciation versus Other Operation and Maintenance (O&M) Cost

This section shows proportion of operation and maintenance costs against depreciation charges that make up a total expenses for NP WSSAs. As indicated in the Figure 74 on average, 74% of the costs was contributed by O & M and 26% was depreciation charges. The cost composition among WSSAs varied greatly due to differences in depreciation policies, value of assets and cost structure as shown in Table A3.15 of Appendix 3.

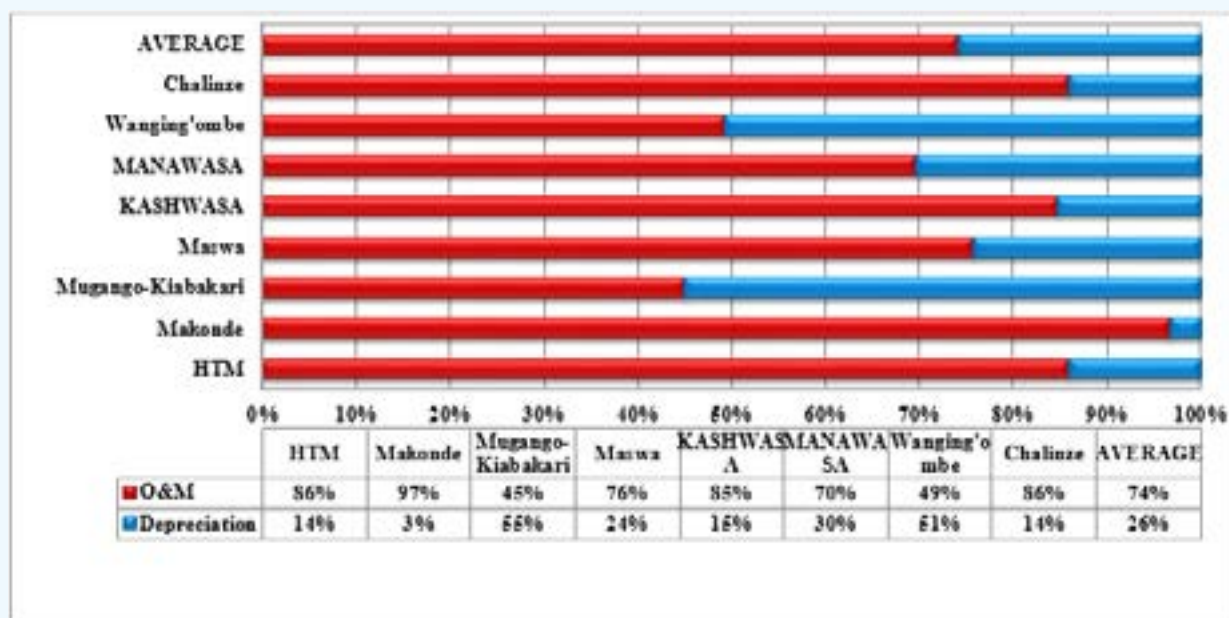


Figure 74: Composition of O&M Costs with Depreciation for NP WSSAs

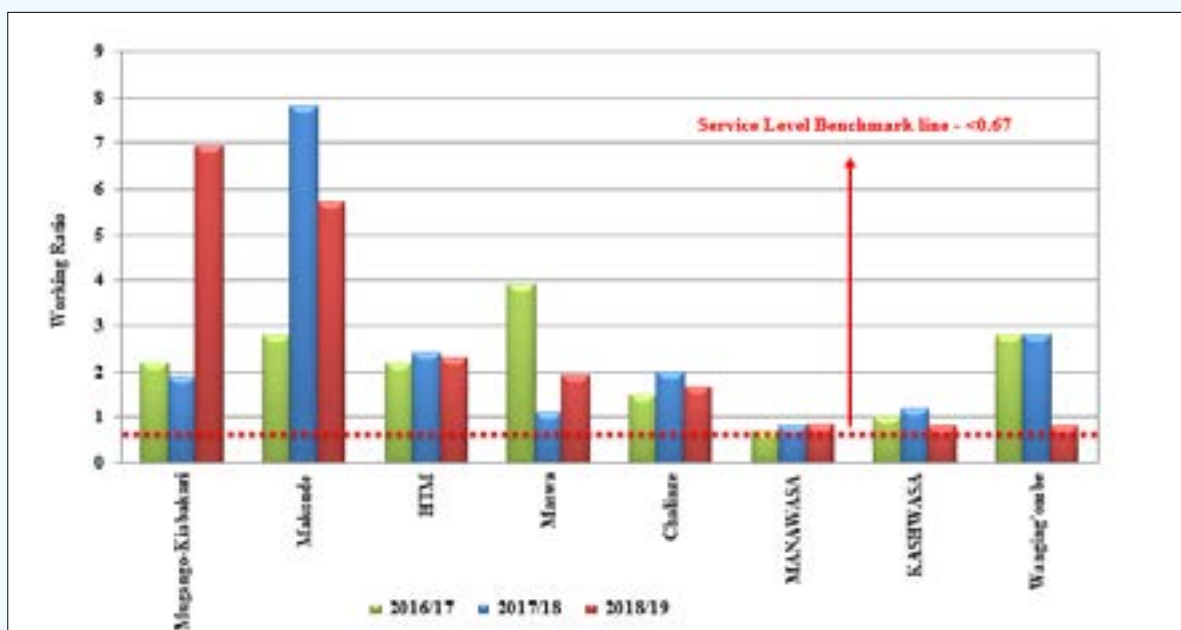
## 9.5 Cost Recovery

This section provides analysis in determining to what extent NP WSSAs covered their operation and maintenance expenses (working ratio) including depreciation (operating ratio).

### 9.5.1 Working Ratio

The overall working ratio continue to deteriorate from 2.1 in FY 2016/17 and 2.5 in FY 2017/18 to 2.6 in FY 2018/19. The deteriorating trend is associated with some of the NP WSSAs who include capital related expenses in the operation expenses and failure to properly account for grants especially revenue grants as per applicable accounting standards. In FY 2018/19, none of the NP WSSAs managed to attain the service level benchmarking of less than 0.67. Figure 75 depicts the individual performance for NP WSSAs for the period of FY 2016/17 to FY 2018/19.

The internal revenue from Mugango Kibakari, Makonde, HTM, Maswa and Chalinze WSSAs covered expenses (without depreciation) by 14%, 18%, 43%, 53% and 59% respectively. With such revenue shortfall, it indicates how much contribution is needed from the Government to bridge the gap. In FY 2018/19, Wanging'ombe, KASHWASA and MANAWASA managed to cover their expenses by using internal revenue and remain with 20% of revenue for capital related expenses.

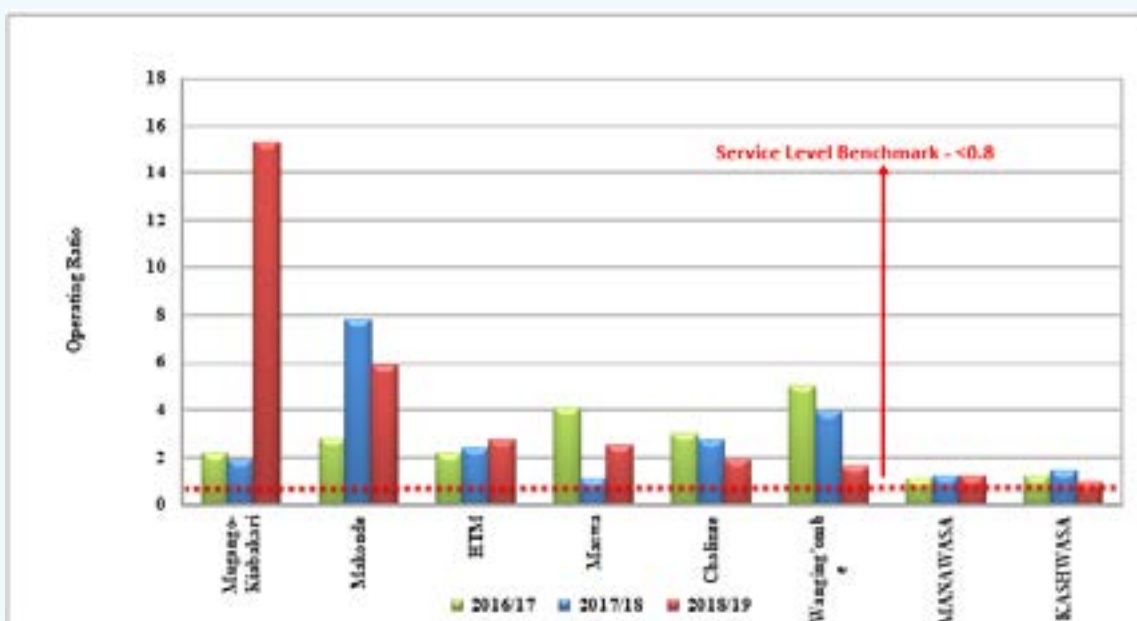


**Figure 75: Working Ratio for NP WSSAs**

### Operating Ratio (OR)

Average operating ratio deteriorated from 2.7 in FY 2016/17 and 2.8 in FY 2017/18 to 4 in FY 2018/19 as depicted in Figure 76. The performance in FY 2018/19 worsened due to inclusion of depreciation charges for the first time by Mugango Kiabakari that resulted to an increase of its expenses by 176%.

At average ratio of 4 means, NP WSSAs covered only a quarter of their expenses by using internal revenue. In FY 2018/19, KASHWASA attained an operating ratio of one which shows that he covered all expenses including depreciation. In FY 2018/19, none of the NP WSSAs attained the service level benchmark of less than 0.8.



**Figure 76: Operating Ratios for NP WSSAs**

## 10.0 COMPLIANCE WITH REGULATORY DIRECTIVES AND REQUIREMENTS

This Chapter discusses the NP WSSAs compliance with regulatory directives and requirements in terms of tariff conditions, reporting requirements and remittance of regulatory levy.

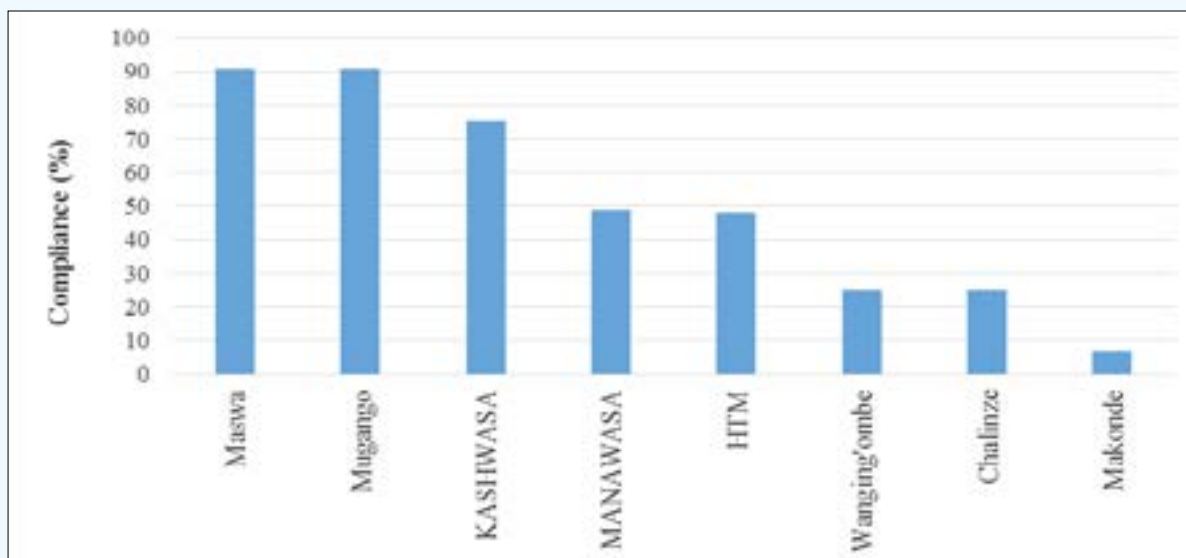
### 10.1 Tariff Review and Compliance with Tariff Order

During the period under review, EWURA received tariff review application from six (6) NP WSSAs. In FY 2018/19, all applications from NPWSSA qualified for EWURA approval. The approved average tariffs for WSSAs are shown in Table 28.

**Table 28: Tariff Review Determinations for NP WSSAs**

S/N	Name of WSSA	Previous average tariff (TZS/m <sup>3</sup> )	Approved Average Metered Tariff (TZS/m <sup>3</sup> )			Effective date
			2018/19	2019/20	2020/21	
1	KASHWASA	580	800	900	985	1 <sup>st</sup> January 2019
2	Makonde	540	1,300	1,300	1,300	15 <sup>th</sup> February 2019
3	Wang'ingombe	395	900	1,100	1,200	1 <sup>st</sup> December 2018
4	Maswa	445	1,100	1,600	1,900	1 <sup>st</sup> May 2019
5	HTM	1,360	2,500	3,600	4,000	1 <sup>st</sup> May 2019
6	Chalinze	1,531	2,280	2,890	2,890	1 <sup>st</sup> June 2019

Compliance with tariff order is evaluated in terms of compliance with tariff conditions contained in Tariff Order of respective WSSA. During the year under review, the overall compliance with tariff conditions among NP WSSAs deteriorated to 51% in FY 2018/19 compared to 66.8% in FY 2017/18 and 53% in FY 2016/17. Figure 77 presents an overall tariff conditions compliance during the reporting period. Details of the compliance for each utility including compliance evaluation criteria are shown in Appendix 4: Table A4.2.



**Figure 77: Evaluation of compliance with tariff conditions for National Project WSSAs**

### 10.2 Reporting Obligations

This section is discussed based on the compliance the Water Supply and Sanitation Act (Water Supply and Sanitation Services) Rules, GN 387 as already explained in Chapter 5 of this Report. During the year under

review KASHWASA complied to all report submission, the least performer in the submission of the reports was Makonde WSSA who did not comply with timely submission of Majls monthly and annual reports and timely submission of annual operational report. Appendix 4: Table A4.1(b) presents the details on the reports submission. Majls Reports.

### **Monthly Majls Reports**

NP WSSAs are required to submit their monthly Majls reports by 14<sup>th</sup> day of the following month. During the reporting period, KASHWASA and Wang'ingombe NP WSSAs complied with report requirement by timely submitting all required 12 Majls monthly reports, the remaining WSSAs did not comply. The overall compliance with monthly Majls report submission was 60%, which is an improvement, compared to 44.8% attained in FY 2017/18 and 42% attained in FY 2016/17.

### **Annual Majls Reports**

During the year under review, three (3) NP WSSAs namely KASHWASA, Maswa and Wang'ingombe submitted their annual Majls reports on time while the remaining six (6) did not submit their annual Majls reports while Mugango-Kiabakari submitted its report late and the remaining four (4) namely Chalinze HTM, Makonde, and MANAWASA did not submit their annual Majls report. The overall compliance with annual Majls report submission in FY 2018/19 was 38% compared to 50% FY 2017/18 and 25% in FY 2016/17.

## **10.2.1 Annual Operational Reports**

### **Annual Technical Reports**

During the year under review, out of eight (8) NP WSSAs only KASHWASA submitted their reports on time, two (2) submitted their report late and five (5) WSSAs did not submit the annual technical report. The WSSA that submitted its report late were Chalinze and Maswa while HTM, Makonde, Mugango-Kiabakari, MANAWASA, and Wang'ingombe WSSAs did not submit their annual report. Summary of report submission status is presented in Table 29 while the details for each NP WSSA is presented in Appendix 4: Table A4.1(b)

### **Annual Financial Reports**

All NP WSSAs submitted their draft financial statements for FY 2018/19 with only Chalinze and KASHWASA being the only NP WSSAs that timely submitted their report. There has been uneven trend in the status of submission of financial statements among the NP WSSAs. The number of WSSAs complying with timely submission of financial statements decreased from seven (7) to two (2) between FY 2018/19 and FY 2017/18 in FY 2016/17 there were four (4) WSSAs.

**Table 29: Three Years Reports Submission Status for NP WSSAs**

	Required Number of Reports	FY 2016/17	FY 2017/18	FY 2018/19
Number of Timely submitted Majls Monthly Reports	96	36	43	64
Number of Timely submitted Technical Reports	8	4	5	1
Number of Timely submitted Financial Reports	8	4	7	2

## **10.3 Compliance with EWURA Remittance of Regulatory Levy**

This Section is discussed similar to the compliance requirements as discussed in Section 5.4 of this report. During the year under review MANAWASA had the highest compliance with remittance of regulatory levy (90%). The least performers were Makonde, Maswa and Wang'ingombe WSSAs with 0% compliance. The levy payment status is presented in Appendix 5 Table A5.1(b)

## 11.0 PERFORMANCE RANKING

This chapter outlines Performance ranking of National Project WSSAs according to the EWURA Performance Benchmarking Guidelines for Water Supply and Sanitation Authorities, 2018. The overall results of the ranking of NP WSSAs is presented into two categories namely the Overall Ranking and the Utility Ranking. Similar to the ranking of Regional WSSAs, the source of data on performance target was the WSSA's approved Business Plan. In the absence of Business Plan, the WSSAs was awarded zero score on the attainment of performance targets.

### 11.1 Procedure for Ranking

The overall procedures for the utility ranking for NP WSSAs is similar of the procedure for ranking of Regional WSSAs presented in Chapter 6 of this report with weights in various indicators presented in Table 30.

**Table 30: Key Performance Indicator Weights**

Indicator No.	Performance Indicators	Weight	Service Level benchmark
KPI 2	Average hours of supply (hrs.)	12%	24
KPI 3	Water quality compliance		
	E-Coli	18%	100
	Turbidity	12%	100
KPI 4	Metering ratio (%)	12%	100
KPI 5	Non-Revenue Water – NRW (%)	12%	<20%
KPI 6	Revenue collection efficiency (%)	18%	>95%
KPI 8	Operating ratio (ratio)	6%	<0.8
KPI 12	Percentage of staff employed by WSSA	10%	100

On the other hand, the score based on compliance with regulatory requirements was evaluated based on attainment of score based on the weight of each obligation as presented in Table 31.

**Table 31: Compliance to regulatory requirements**

Code No.	Regulatory Requirement	Total Score
CRR1	Timely submission of monthly Majls reports	12
CRR2	Timely submission of draft annual Majls report	5
CRR3	Timely submission of draft annual report	5
CRR4	Timely submission of draft financial statements	5
CRR5	Payment of regulatory levy	25
CRR6	Presence of approved business plan	10
CRR7	Presence of approved customer service charter	10
CRR8	Submission of final annual report for the previous year	10
CRR9	Availability of Water Quality Monitoring Plan	18

## 11.2 Classification of Performance Scores

The overall score classification for performance of NP WSSAs is similar to the classification of Regional WSSAs as presented in Table 21 of this Report (section 6.4).

## 11.3 Results of Performance Ranking

### 11.3.1 Overall Ranking Results

Based on the above overall ranking KASHWASA emerged the overall best NP WSSA in the provision water services after scoring 75.9 points, which is categorized as very good performance. On the other hand, Makonde WSSA was the overall least performer in the provision of water services.

### 11.3.2 Utility Ranking Results

Based on the criteria for determining utility, KASHWASA WSSA was the best performer under the category of utility ranking in water services while Makonde, MANAWASA, Maswa, Mugango-Kiabakari and Wanging'ombe WSSAs are the least performers.

Table 34 summarizes the results on the performance ranking evaluation NP WSSAs in provision of water supply and sanitation services.

**Table 32: Summary of NP WSSAs' Ranking in the Provision of Water Services**

SN	Utility Name	Total Weighted Score Based on KPIs	Reporting Score	Overall Ranking			Utility Ranking Score				
				Overall Ranking Score	Classification	Interpretation	Overall Rank	Utility Ranking Score	Utility Rank	Classification	Interpretation
1	Chalinze	44.3	14.4	58.7	C	Good	3	18.6	3.0	E	Unsatisfactory
2	HTM	34.5	7.8	42.3	D	Fair	4	26.9	2.0	E	Unsatisfactory
3	KASHWASA	52.3	23.6	75.9	B	Very Good	1	35.7	1.0	E	Unsatisfactory
4	Makonde	26.9	0.9	27.8	E	Unsatisfactory	8	0.0	4.0	E	Unsatisfactory
5	MANAWASA	49.8	11.4	61.2	C	Good	2	0.0	4.0	E	Unsatisfactory
6	Maswa	24.8	6.6	31.4	E	Unsatisfactory	7	0.0	4.0	E	Unsatisfactory
7	Mugango-Kiabakari	31.3	9.3	40.6	D	Fair	6	0.0	4.0	E	Unsatisfactory
8	Wanging'ombe	31.1	11.1	42.2	D	Fair	5	0.0	4.0	E	Unsatisfactory

**PART III:**  
**IMPLEMENTATION OF THE OBSERVATIONS AND**  
**RECOMMENDATIONS MADE IN THE PREVIOUS**  
**REPORT**

## 12.0 IMPLEMENTATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

This Chapter discusses the implementation of the recommendations that were made in the previous year FY 2017/18 report. The report contained recommendations on five (5) key issues , which were protection of water sources, cost recovery, high Non-revenue water, Lack of sewerage systems, and unreliable collection efficiency data. The implementation of the recommendations is unsatisfactory particularly in the areas of having in place water safety plan, extension of sewerage network and having in place software capable of separating arrears from current bills sells. Detailed implementation of the recommendations of the previous year report is presented in Appendix 4. It is still recommended that, WSSAs should improve on implementation of the recommendations provided in the report.

**PART IV:**  
**KEY OBSERVATIONS AND**  
**RECOMMENDATIONS**

## 13.0 KEY OBSERVATIONS AND RECOMMENDATIONS

This chapter presents the major observations encountered during the preparation of this report. In order to improve the performance of WSSAs, subsequent measures for each observation have been recommended. Table 33 presents the major key observed issues, recommended solutions and the responsible entity for correcting the observed issue.

**Table 33: Key Observations and Recommendations**

SN	Key Issue	Observation	Recommendation	Deadline	Responsible
1	High Non-Revenue Water (NRW)	It was observed that the overall NRW is still far from the service level benchmark of 20%. Only Kahama, Shinyanga and KASHWASA WSSAs were able to achieve the service level benchmark for NRW.	Regional WSSAs should implement strategies to ensure satisfactory pace of reduction trend of NRW. The NRW reduction strategies should be included in their business plans.	Continuous	Managing Directors of Regional and NP WSSAs
		Inadequate coordination among different stakeholders in WSSAs' service areas during execution of other infrastructure projects has resulted into water pipe cuts and hence increase in NRW	WSSAs shall ensure that they are informed on any project that may result in pipe cuts in order to prevent water losses.	Continuous	Managing Directors of Regional and NP WSSAs
2	Lack of sewerage systems.	Only 11 WSSAs out of 33 Regional and NP WSSAs have sewerage system.	Water Utilities should initiate and implement projects for construction of sewerage systems.	June 2021	Managing Directors of Regional and NP WSSAs
3	Low utilization of water supply and sewerage network	WSSAs have not yet full utilized the available water supply and sewerage network	Water Utilities should ensure efficient utilization of the available water and sewerage network by having in place strategies that will ensure increase in number of water and sewerage customers. The strategies should be incorporated in WSSAs business plans.	Continuous	Managing Directors of Regional and NP WSSAs
4	Unreliable collection efficiency data	Out of 26 Regional and eight NP WSSAs, DAWASCO, Babati, Sumbawanga, Songea, Morogoro and Shinyanga WSSAs, have software capable of separating arrears from current bill collection using their billing software.	Water Utilities should ensure they have a mechanism that will enable separation of arrears from the collection from current bills	June 2020	Managing Directors of Regional and NP WSSAs
5	Inadequate number and qualified Staff in NP WSSAs.	Only HTM WSSA among NP WSSAs have managed to comply with the required establishment	NP WSSAs are required to ensure they have enough and qualified staff	Continuous	Managing Directors of NP WSSAs

In conclusion, generally, the performance of RNP WSSAs in FY 2018/19 as compared to FY 2017/18 has shown improvement in the areas of water abstraction; water production; water and wastewater quality compliance; customer metering; water service coverage; staff productivity and water sales collections. Despite the mentioned improvements, the report has identified areas for improvement, which include addressing the issues of high Non Revenue Water; lack sewerage systems; unreliable collection efficiency; inadequate number and qualified staff in NP WSSAs; and low utilization of water supply and sewerage network. RNP WSSAs need to implement recommendations regarding the identified issues and include them as part of their business plan targets. It is envisaged that implementation of the recommendations will result into improvement in water and sanitation services provided by RNP WSSAs.

# **APENDICES**

**APPENDIX 1:**  
**WSSAs PROFILES**  
**REGIONAL WSSAs PROFILES**



**ARUSHA WSSA PROFILE**  
**EWURA CLASS II LICENSE NO: WSSSL/16/11**
**2018/19**

Water Utility	Arusha WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Arusha City. Arusha WSSA is classified as Category A water utility and its area of responsibility has a total population of 637,494 as projected from 2012 census report out of whom 323,904 people are served with water by the utility. The utility draws water from three type of water sources; a river (Nduruma River – 17%), spring sources (Olgilai, Machare and Ngarendolu springs-44%) and boreholes (19 boreholes -39%). The combined production capacity is 57,486m³/day while water demand stands at 104,972m³/day. The Utility has a sewerage system with total length of 49.11 km, serving about 8% of the population, further; sewage treatment is done by five wastewater stabilization ponds. The average daily flow into the ponds is 6,500m <sup>3</sup> /day while the design capacity is 3,500m³/day resulting into overloading of the ponds. Arusha WSSA has 284 staff and is implementing Customer Service Charter approved by EWURA.					
General Data About Water Utility	Total Water Connections		57,015			
	Active Water Connections		48,547			
	Total Sewerage Connections		5,607			
	Total Staff		314			
	Annual O&M Costs		TZS 12,550,209,262.00			
	Annual Water and Sewerage Collections		TZS 14,843,576,949.00			
	Annual Water and Sewerage Billings		TZS 13,775,149,322.00			
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Industrial	Bottling
	0-5m³	1,170	1,330	1,700	2,250	13,450
	>5 ≤ 10	1,360	1,330	1,700	2,250	13,450
	>15	1,590	1,330	1,700	2,250	13,450
	Note: Water Kiosk tariff is TZS 20 per 20litre container					
	Sewerage Tariff					
Category		Domestic	Institution	Commercial	Industrial	
TZS per m³ of drinking water		355	480	705	820	
Effective date of the tariffs: 1 <sup>st</sup> December, 2018.						
Priority of Needs	1. Addition of new water sources; 2. Extension of water supply network 3. Improvement of the existing sewerage network and wastewater treatment plant 3. Reduction of Non-Revenue Water to the acceptable level; 4. Improvement of revenue collection					
Customer Service	Average monthly water consumption is about 11m³ per domestic connection with per capita consumption of 33lts/day. Water is available at an average of 15 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard due to overloading of the treatment plant. During the year under review, there were 2,966 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 152.7 and 51% of the total complaints are related to low water pressure or lack of water followed by leakages (34%) which are the highest among all complaints received.					
Performance Highlights	Arusha WSSA provides water supply direct to 46% of the population in its service area. NRW is at 44.1% Bulk meters are installed at all water production points and all customer water connections are metered. Operating and working ratios are good at 0.93 and 0.81 respectively. Accounts receivable equivalent is at 2.4 months. Average tariff at TZS 1,549 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 5.					

## ARUSHA WSSA PROFILE

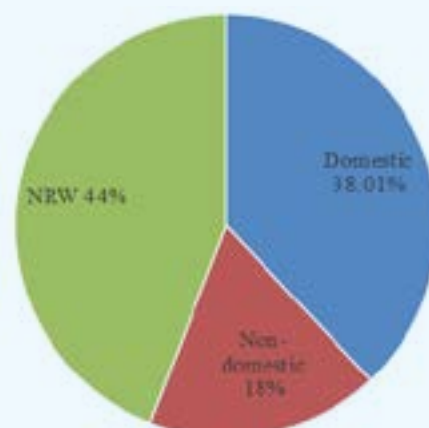
2018/19

### Production/Distribution

Average daily production	4,2896m <sup>3</sup>
Production capacity/day	57,486m <sup>3</sup>
Treatment type	Chlorine Dosing
Storage capacity	13,645m <sup>3</sup>
Length of Water network	558.9km
Length of Sewerage Network	49.1km

### Service Connections

Total water connections	57,015
Domestic water connections	50,505
Total sewer connections	5,607
Domestic sewer connections	4,528
Metered water connection	100%



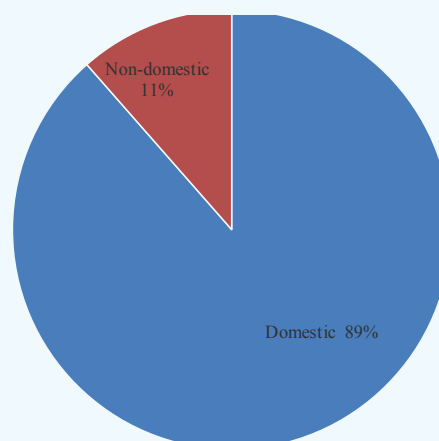
**ANNUAL WATER USE: 15,697,922 m<sup>3</sup>**

### Service Indicators

Water Service Coverage	72%
Population directly served	46%
Service hours	15
Per capita consumption	33l/c/d
Average Tariff	1,549 TZS/m <sup>3</sup>
Complaints/1000 connection	152

### Efficiency Indicators

Non-Revenue Water	44.1%
Revenue collection efficiency	107.76% (arrears included)
Unit production cost	813.5 TZS/m <sup>3</sup>
Operating ratio	0.93
Working ratio	0.81
Accounts receivables	2.4
Staff/1000 total connections	5
Number of Sewer Blockage	15.5 nr/km/year



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 21,951,173,942.00**

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 13,775,149,322.00
Government /Donor Grants TZS - Amortized Grants	TZS 118,135,476.00
Other income	TZS 1,950,306,748.00

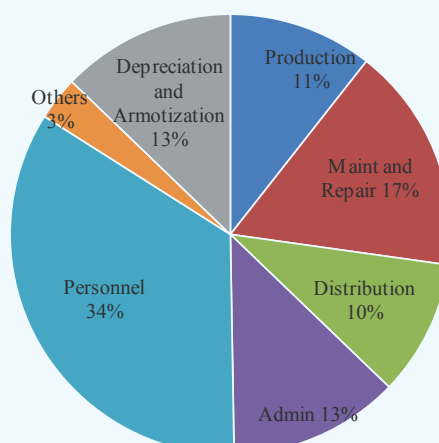
### TOTAL INCOME

**TZS 15,843,591,546.00**

Water Production Expenses	TZS 1,524,661,891.00
Water distribution Expenses	TZS 1,435,392,128.00
Maintenance and Repair	TZS 2,392,589,396.00
Personnel Expenses	TZS 4,930,976,330.00
Administration Expenses	TZS 1,804,204,671.00
Other O&M Expenses	TZS 462,384,846.00
Total O&M	TZS 12,550,209,262.00
Depreciation & Amortization	TZS 1,840,659,787.00

### ANNUAL EXPENDITURE

**TZS 14,390,869,049.00**



**ANNUAL EXPENDITURE TZS 14,390,869,049.00**

**DAWASA PROFILE**  
**EWURA LICENSE NO: N/A**
**2018/19**

Water Utility	DAWASA was re-established after disestablishment of the former DAWASA effective from 1 <sup>st</sup> July 2018. DAWASA is responsible for the infrastructure development, overall operations and management of water supply and sanitation services in the Dar es salaam City comprising of Ilala, Kigamboni, Temeke, Kinondoni and Ubungo Municipalities, and Coast Region comprising of Kibaha, Mkuranga and Kisarawe Towns. DAWASA as Category A classified water utility has a total population of 6,553,952 people in its area of responsibility of which 4,964,586 are served by the utility. The utility draws water from two rivers (Ruvu and Kizinga) contributing about 99% of the daily water production and from twenty (20) boreholes contributing 1%. The combined production capacity is 486,592 m <sup>3</sup> /day while water demand stands at 569,791 m <sup>3</sup> /day. The utility has a sewerage system with sewer line of 195 km in length, and eight (8) wastewater stabilization ponds. DAWASA has 1,113 staff and they are operating without an approved Customer Service Charter. DAWASA operates with a licence that was issued by MoW before existence EWURA.						
General Data About Water Utility	Total Water Connections		261,294				
	Active Water Connections		250,259				
	Total Wastewater Connections		19,806				
	Total Staff		1,113				
	Annual O & M Costs		TZS 169,476,284,000.00				
	Annual Water and Sewerage Collections		TZS 121,389,286,372.00				
	Annual Water and Sewerage Billing		TZS 133,411,921,451.00				
Tariff Structure	Water Tariff						
	Category		Domestic	Institutional	Commercial	Industrial	Kiosk
	TZS/m <sup>3</sup>		1663	1663	1663	1663	1,106
	Note: Water Kiosk tariff is TZS 15.6 per 20litre container						
	Sewerage Tariff						
	Category		Domestic	Institution	Commercial	Industrial	
	TZS per m <sup>3</sup>		386	386	386	386	
	Effective date of the tariffs: 1 <sup>st</sup> November 2015 as Extended by Provisional Tariff Order, 2018 effective from 1 <sup>st</sup> July 2018						
Priority of Needs	1. Increase water and sewerage coverage 2. NRW reduction 3. Increase number of water household connections 4. Improve revenue collection efficiency.						
Customer Service	Average monthly water consumption is about 16m <sup>3</sup> per domestic connection with per capita consumption of 23lts/day. Water is available at an average of 21.8 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard due to overloading of the treatment plant (wastewater stabilization ponds). During the year under review, there were 91,502 consumer complaints reported of which 64,600 were resolved. The total number of complaints per 1000 connections is 350 and 48% of the total complaints are on billing, which is the highest among all complaints received.						
Performance Highlights	DAWASA provides water supply direct to 75.7% of the population in its service area. NRW is unsatisfactory, as it rose from 45% in FY 2017/18 to 48.4% in FY 2018/19. All water production points are installed with bulk meters and all active customer water connections are metered. Operating and working ratios are unsatisfactory and they stand at 1.09 and 1.05 respectively. Accounts receivable is at 4.3 months. Average tariff is TZS 1,663 per m <sup>3</sup> fair enough to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 4.3.						

## DAWASA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	401,199	m <sup>3</sup> /day
Production capacity/day	486,592	m <sup>3</sup> /day
Treatment type	Conventional	
Storage capacity	128,695	m <sup>3</sup>
Length of Water network	3220	km
Length of Sewerage Network	194.866	km

### Service Connections

Total water connections	261,294
Domestic water connections	254,018
Total sewer connections	19,806
Domestic sewer connections	19,806
Metered water connections	250,320

### Service Indicators

Water Service Coverage	85	%
Population directly served	76	%
Service hours	21.8	hours
Per capita consumption	23	l/c/d
Average Tariff	1663	TZS/m <sup>3</sup>
Complaints/1000 connection	350	

### Efficiency Indicators

Non-Revenue Water	48.38	%
Revenue collection efficiency	91.0	%
Unit production cost	574	TZS/m <sup>3</sup>
Operating ratio	1.1	
Working ratio	1.1	
Accounts receivables	4.3	months
Staff/1000 total connections	4.28	
Number of Sewer Blockage	16.45	nr/km/year
Water Quality Compliance	100	%

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 116,114,779,000.00
Government /Donor Grants	TZS 0
Amortized Grants	TZS 20,980,256,000.00
Other income	TZS 22,224,350,000.00

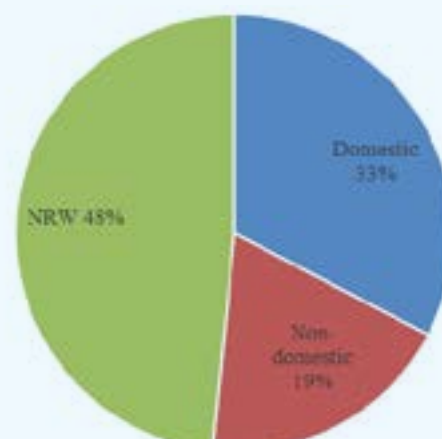
### TOTAL INCOME

**TZS 159,319,385,000**

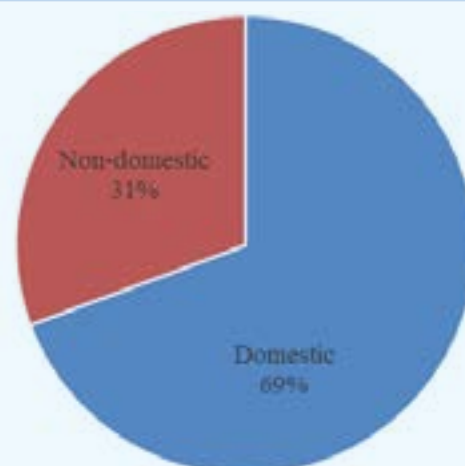
Water Production Expenses	TZS 36,825,650,000.00
Water distribution Expenses	TZS 8,589,805,000.00
Maintenance and Repair	TZS 20,786,840,000.00
Personnel Expenses	TZS 73,779,524,000.00
Administration Expenses	TZS 29,461,232,000.00
Other O & M Expenses	TZS 33,233,000.00
Total O & M	TZS 169,476,284,000
Depreciation and Amortization	TZS 20,980,256,000.00

### ANNUAL EXPENDITURE

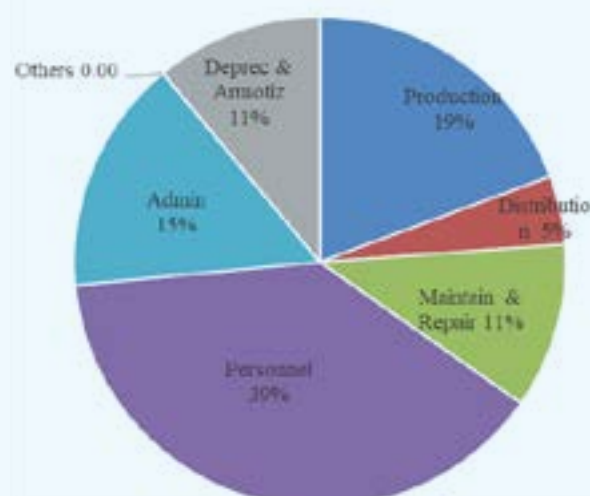
**TZS 190,456,540,000**



**ANNUAL WATER USE: 75,603,259 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 133,411,921,451**



**ANNUAL EXPENDITURE TZS 190,456,540,000.00**

**DODOMA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/05/2011**

Water Utility	Dodoma WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Dodoma City. Dodoma WSSA is classified as Category A water utility and its area of responsibility has a total population of 500,000 as projected from the 2012 census report out of whom 388,800 people are served by the utility. The utility draws water from groundwater sources (borehole - 100%) having 24 boreholes in total located at the Mzakwe well field. Currently, 12 boreholes are functioning while the remaining 12 are standby boreholes. The combined production capacity is 61,500m³/day while water demand stands at 46,000m³/day. The Utility has a sewerage system with total length of 113.75 km, serving about 8.20% of the population, further, sewage treatment is done by Wastewater Stabilization Ponds (WSPs). Dodoma WSSA has 184 staff and is implementing Customer Service Charter approved by EWURA.					
General Data About Water Utility	Total Water Connections	43,837				
	Active Water Connections	43,623				
	Total sewerage Connections	5,822				
	Total Staff	184				
	Annual O&M Costs	TZS 19,582,008,000.00				
	Annual Water and Sewerage Collections	TZS 18,072,563,407.00				
	Annual Water and Sewerage Billings	TZS 21,610,443,000.00				
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Industrial	Bulk Customers
	0-5	1,160	1,610	1,630	1,630	1,800
	6-10	1,225				
	11 -30	1,245				
	>30	1,295				
	Note: Water Kiosk tariff is TZS 24 per 20 litre					
	Sewerage Tariff					
	Category		Domestic	Institution	Commercial	Industrial
	TZS per m³ of drinking water		40%	40%	40%	40%
Note: Effective date of the tariffs: 1 <sup>st</sup> June 2019						
Priority of Needs	1.Increase water supply coverage 2. Increase sewerage services coverage 3. Improve of revenue to match expenditures 4.Improve revenue collection efficiency.					
Customer Service	Average per capita consumption of 38lts/day. Water is available at an average of 22 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard due to overloading of the ponds. During the year under review, there were 3,001 consumer complaints reported of which all were resolved.					
Performance Highlights	Dodoma WSSA provides water supply direct to 82% of the population in its service area. NRW is slightly higher (at 27%) than the recommended values. Bulk meters are installed at all water production points and all customer water connections are metered. Operating and working ratios are good at 0.8 and 0.99 respectively. Accounts receivable equivalent are unsatisfactory at 4.4 months. Average tariff is TZS 1,383 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 3.7.					

## DODOMA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	54,000m <sup>3</sup>
Production capacity/day	61,500m <sup>3</sup>
Treatment type	Chlorination
Storage capacity	91,470m <sup>3</sup>
Length of Water network	533.15km
Length of Sewerage Network	113.75km

### Service Connections

Total water connections	43,837
Domestic water connections	40,240
Total sewer connections	5109
Domestic sewer connections	5,000
Metering ratio	100%

### Service Indicators

Water Service Coverage	82%
Population directly served	78%
Service hours	22
Per capita consumption	37l/c/d
Average Tariff	1,383 TZS/m <sup>3</sup>

### Efficiency Indicators

Non-Revenue Water	27%
Revenue collection efficiency	78%
Unit production cost	1,132 TZS/m <sup>3</sup>
Operating ratio	0.88
Working ratio	0.99
Accounts receivables	4.4
Staff/1000 total connections	3.7

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 14,928,008,000.00
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 6,682,435,000.00

### TOTAL INCOME

**TZS 21,610,443,000.00**

Water Production Expenses	TZS 3,736,979,000.00
Water distribution Expenses	TZS 3,117,471,000.00
Maintenance and Repair	TZS 586,200,000.00
Personnel Expenses	TZS 8,873,042,000.00
Administration Expenses	TZS 3,268,316,000.00
Other O&M Expenses	TZS

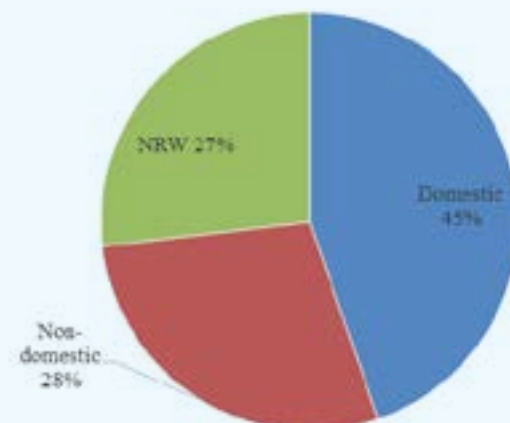
### Total O&M

**TZS 19,582,008,000.00**

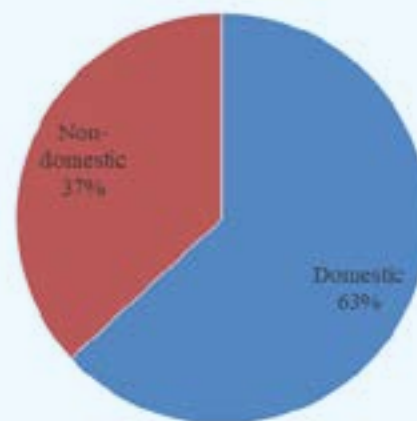
Depreciation & Amortization	TZS 7,578,713,000.00
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### ANNUAL EXPENDITURE

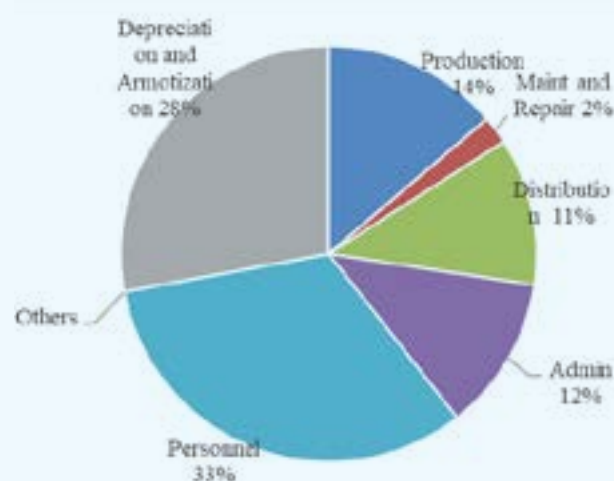
**TZS 19,582,008,000.00**



**ANNUAL WATER USE:15,447,509 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 21,610,443,000**



**ANNUAL EXPENDITURE TZS 19,582,008,000.00**

**IRINGA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENCE NO: WSSSL/10/2011**

Water Utility	Iringa WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Iringa Municipality. Iringa WSSA is classified as Category A water utility and its area of responsibility has a total population of 173,995 as projected from 2012 census report out of whom 169,413 people are served with water by the utility. The utility draws water from surface and ground water sources (river 83%) and spring 16%), ground water and Kibwabwa borehole 1%). The combined production capacity is 24,330m³/day while water demand stands at 16,000 m³/day. The Utility has a sewerage system with total length of 61km, serving about 18% of the population, Sewage treatment is done by wastewater stabilization ponds. Iringa WSSA has 106 staff and is implementing Customer Service Charter approved by EWURA.				
General Data About Water Utility	Total Water Connections	25,058			
	Active Water Connections	21, 046			
	Total sewerage Connections	1,897			
	Total Staff	106			
	Annual O&M Costs	TZS 8,876,631,099.00			
	Annual Water and Sewerage Collections	TZS 7,338,719,575.00			
	Annual Water and Sewerage Billings	TZS 7,344,759,786.00			
Tariff Structure	Water Tariff				
	Category	Domestic	Institutional	Commercial	Industrial
	1-5	1,830	1,780	1,690	1,910
	6 -40	1,970	2,060		
	> 40	2,210	2,210		
	Note: Water Kiosk tariff is TZS 20 per 20 litre				
	Sewerage Tariff				
	Category	Domestic	Institution	Commercial	Industrial
	TZS per m³ of drinking water	40%	50%	50%	50%
	Note: Effective date of the tariffs: 1 <sup>st</sup> May 2019				
Priority of Needs	1. Improve water supply and sanitation services coverage. 2 Reduction of NRW. 3 Improve collection efficiency 4 Improve public relations and customer awareness 5 Improve human resource and administration management. 6. Improve Staff per 1000 total water and sewerage connections.				
Customer Service	Average daily water per capita consumption of 43 lts/day. Water is available at an average of 24 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard. During the year under review, there were 9146 consumer complaints reported of which all were resolved. The highest proportion of complaints is on other issues than sewerage, leakage, lack of water, water quality, connection charge, billing and meter reading.				
Performance Highlights	Iringa WSSA provides water supply direct to 95% of the population in its service area. NRW at 26% is slightly higher than the recommended. Bulk meters are installed at all water production points and all customer water connections are metered. Operating and working ratios are 0.99 and 0.80 respectively. Accounts receivables equivalent is 1.4 months. Average tariff is TZS 2000 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 4.				

## IRINGA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	12,994m <sup>3</sup>
Production capacity/day	24,330m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	7,440m <sup>3</sup>
Length of Water network	584km
Length of Sewerage Network	61.9km

### Service Connections

Total water connections	25,058
Domestic water connections	23,800
Total sewer connections	2,178
Domestic sewer connections	1,897
Metering ratio	100%

### Service Indicators

Water Service Coverage	98%
Population directly served	95%
Service hours	24
Per capita consumption	43l/c/d
Average Tariff	2,000 TZS/m <sup>3</sup>

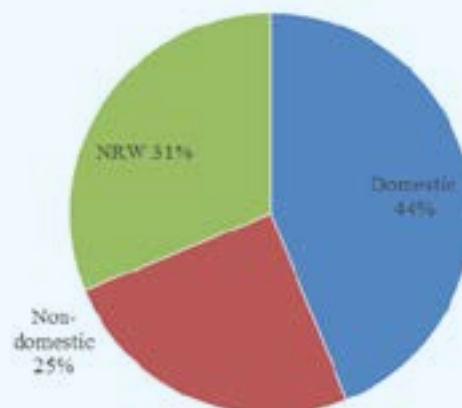
### Efficiency Indicators

Non-Revenue Water	26%
Revenue collection efficiency	96%
Unit production cost	1,131 TZS/m <sup>3</sup>
Operating ratio	0.8
Working ratio	0.99
Accounts receivables	1.4
Staff/1000 total connections	4.
Number of Sewer Blockage	21 nr/km/year

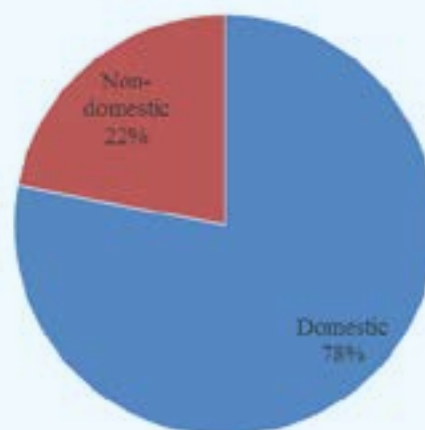
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 7,338,719,575.00
Government /Donor Grants	TZS
Amortized Grants	TZS 3,158,185,898.00
Other income	TZS 3,571,592,787.00
<b>TOTAL INCOME</b>	<b>TZS 14,390,585,954.00</b>

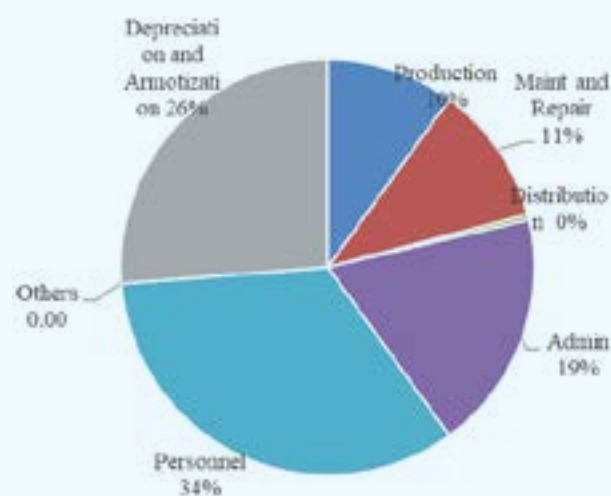
Water Production Expenses	TZS 1,207,173,992.00
Water distribution Expenses	TZS 50,420,179.00
Maintenance and Repair	TZS 598,827,729.00
Personnel Expenses	TZS 4,062,011,690.00
Administration Expenses	TZS 2,247,755,166.00
Other O&M Expenses	TZS
<b>Total O&amp;M</b>	<b>TZS 8,876,631,099.00</b>
Depreciation & Amortization	TZS 3,158,185,898.00
<b>ANNUAL EXPENDITURE</b>	<b>TZS 8,876,631,099.00</b>



**ANNUAL WATER USE: 5,140,521 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 7,344,759,786.00**



**ANNUAL EXPENDITURE TZS 8,876,631,099.00**

**KAHAMA WSSA PROFILE**
**2018/19**
**EWURA LICENSE NO: WSSSL/66/2012**

Water Utility	Kahama Water Supply and Sanitation Authority (Kahama WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services in the Kahama Town. Its area of operation has a total population of 176,653 people while served population is 135,312 people (About 141,852 people are living in area with water network). Kahama WSSA depends mainly on bulk water purchase from KASHWASA as its source of water supply. However, it has its own water source - the Kahama dam as an additional and standby water supply in case of failures of the bulk water supply. Currently, Kahama dam is not operational as it is highly contaminated by human activities taking place around the catchment area. Water services are available at an average of 23 hours per day. The Utility does not have sewerage system and sewage treatment plant. Sanitation services operates under the supervision of Kahama District Council. KahamaWSSA has water quality monitoring program, of which it outsources water quality services from Shinyanga regional water quality laboratory to audit the quality of water it produces. Kahama WSSA has a total work force of 52, and currently it has a Client Service Charter.																															
General Data About Water Utility	Total Water Connections	17,622																														
	Active Water Connections	17,622																														
	Total Staff	52																														
	Annual O & M Costs	TZS 8,031,369,240.00																														
	Annual Water Collections	TZS 5,885,767,755.00																														
	Annual Water Billing	TZS 6,058,310,780.00																														
Tariff Structure	<table><tr><th>Category</th><th>Domestic</th><th>Institutions</th><th>Commercial</th><th>Industrial</th><th>Kiosks</th><th>Car Wash</th><th>Mining</th></tr><tr><td>TZS./m³</td><td>1,688</td><td>2,060</td><td>2,165</td><td>2,327</td><td>2,000</td><td>3,125</td><td>3,275</td></tr><tr><td>Service Charges (TZS/Month)</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>	Category	Domestic	Institutions	Commercial	Industrial	Kiosks	Car Wash	Mining	TZS./m³	1,688	2,060	2,165	2,327	2,000	3,125	3,275	Service Charges (TZS/Month)	0	0	0	0	0	0	0							
	Category	Domestic	Institutions	Commercial	Industrial	Kiosks	Car Wash	Mining																								
	TZS./m³	1,688	2,060	2,165	2,327	2,000	3,125	3,275																								
	Service Charges (TZS/Month)	0	0	0	0	0	0	0																								
<b>Note:</b> Kiosk sale: TZS 40 per 20 litre jerry <b>Effective date of tariff: 1<sup>st</sup> January, 2019</b>																																
Priority of Needs	1. Extension of water distribution network to uncovered areas. 2. Construction of sewerage network and wastewater treatment facilities.																															
Customer Service	Average monthly water consumption is about 12m³ per domestic connection with daily per capita consumption of 45 liters. Water is available at an average of 23 hours a day .Water quality is good, with overall average compliance of 98%. There were 529 customer complaints reported and were all resolved. The total number of complaints per 1,000 connections is 30 and 53% of the total complaints are bill related.																															
Performance Highlights	Kahama WSSA provides water supply direct to 76.6% of the population in its service area at an average of 23hours per day. The NRW IS 12.4%. All production points, district zones and service connections are metered. Operating ratio is satisfactory at 0.98 and working ratio at 0.89. Accounts receivable equivalent is unsatisfactory at 3.9 months. Average tariff at TZS 1,961.0 per m³ is fair and enough to cover operating expenses and part of investment. Staff/1000 connections ratio is 3.0 and the Total Population in the service area is 176,653 people.																															

# KAHAMA WSSA PROFILE

## EWURA LICENSE NO: WSSSL/66/2012

2018/19

### Production/Distribution

Average daily production	11,167	m <sup>3</sup> /day
Production capacity/day	26,000	m <sup>3</sup> /day
Treatment type	Chlorination	
Storage capacity	18,550	m <sup>3</sup>
Length of Water network	327.14	km

### Service Connections

Total water connections	17,622
Domestic water connections	16,366
Total sewer connections	NIL
Domestic sewer connections	NIL
Metered water connections	17,622

### Service Indicators

Water Service Coverage	80.3	%
Population directly served	77	%
Service hours	23	hours
Per capita consumption	45	l/c/d
Average Tariff	1961	TZS/m <sup>3</sup>
Complaints/1000 connection	30	

### Efficiency Indicators

Non-Revenue Water	12.40	%
Revenue collection efficiency	97	%
Unit production cost	1,318	TZS/m <sup>3</sup>
Operating ratio	1.0	
Working ratio	0.9	
Accounts receivables	3.9	months
Staff/1000 total connections	3	
Number of Sewer Blockage	NA	nr/km/year

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 6,095,653,325.00
Government /Donor Grants	TZS 0
Amortized Grants	TZS 578,269,909.00
Other income	TZS 754,676,858.00

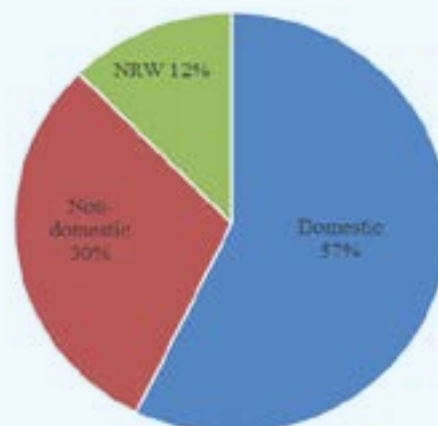
### TOTAL INCOME

**TZS 7,428,600,092**

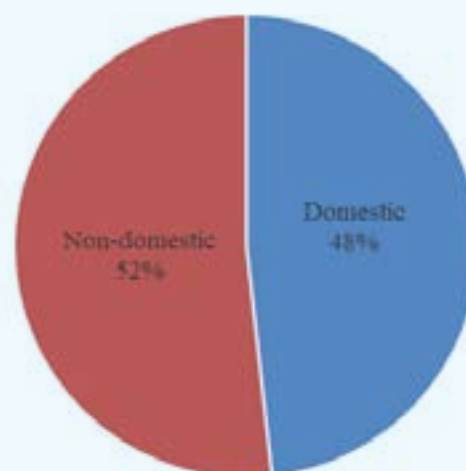
Water Production Expenses	TZS 2,766,052,440
Water distribution Expenses	TZS 373,862,404
Maintenance and Repair	TZS 708,052,374
Personnel Expenses	TZS 2,291,042,776
Administration Expenses	TZS 1,716,990,438
Other O & M Expenses	TZS 175,368,808
Total O & M	TZS 8,031,369,240
Depreciation and Amortization	TZS 578,269,909

### ANNUAL EXPENDITURE

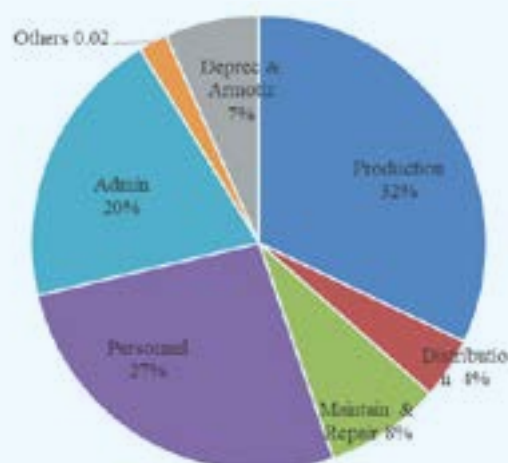
**TZS8,609,639,149**



**ANNUAL WATER USE 3,570,269 m<sup>3</sup>**



**ANNUAL WATER BILLING TZS 6,058,310,780**



**ANNUAL O & M COSTS TZS 8,609,639,149.00**

**MBEYA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENCE NO: WSSSL/15/2011**

<b>Water Utility</b>	Mbeya WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Mbeya City and Mbalizi area. Mbeya WSSA is classified as Category A water utility and its area of responsibility has a total population of 556,000 as projected from 2012 census out of whom 439,394 people are served with water by the utility. The utility draws water from surface (River - 44%) and groundwater sources (spring - 56%). The combined production capacity is 51,446m <sup>3</sup> /day while water demand stands at 60,000m <sup>3</sup> /day. The Utility has a sewerage system with total length of 132 km, serving about 12% of the population. Sewage treatment is done by wastewater stabilization ponds. Mbeya WSSA has a total of 229 staff.																												
<b>General Data About Water Utility</b>	Total water connection 65389 Total active connection 64859 Total Staff 229 Annual O&M Costs TZS 13,100,714,143 Annual Water and Sewerage Collections TZS 8,939,696,452 Annual Water and Sewerage Billings TZS 8,888,596,314.00																												
<b>Tariff Structure</b>	<b>Water Tariff</b> <table border="1"> <thead> <tr> <th>Category</th><th>Domestic</th><th>Institutional</th><th>Commercial</th><th>Industrial</th></tr> </thead> <tbody> <tr> <td>TZS/m<sup>3</sup></td><td>1,000 – 1,300</td><td>1,500 – 1,700</td><td>1,500 – 1,700</td><td>1,700 – 1,900</td></tr> </tbody> </table> <p><b>Note:</b> Water Kiosk tariff is TZS 20 per 20 litre</p> <b>Sewerage Tariff</b> <table border="1"> <thead> <tr> <th>Category</th><th>Domestic</th><th>Institution</th><th>Commercial</th><th>Industrial</th></tr> </thead> <tbody> <tr> <td>TZS per m<sup>3</sup> of drinking water</td><td>385</td><td>500</td><td>575</td><td>700</td></tr> <tr> <td>Flat rate</td><td>20,000</td><td>24,000</td><td>36,000</td><td>36,000</td></tr> </tbody> </table> <p><b>Note: Effective date of the tariffs: 1<sup>st</sup> December 2018</b></p>				Category	Domestic	Institutional	Commercial	Industrial	TZS/m <sup>3</sup>	1,000 – 1,300	1,500 – 1,700	1,500 – 1,700	1,700 – 1,900	Category	Domestic	Institution	Commercial	Industrial	TZS per m <sup>3</sup> of drinking water	385	500	575	700	Flat rate	20,000	24,000	36,000	36,000
Category	Domestic	Institutional	Commercial	Industrial																									
TZS/m <sup>3</sup>	1,000 – 1,300	1,500 – 1,700	1,500 – 1,700	1,700 – 1,900																									
Category	Domestic	Institution	Commercial	Industrial																									
TZS per m <sup>3</sup> of drinking water	385	500	575	700																									
Flat rate	20,000	24,000	36,000	36,000																									
<b>Priority of Needs</b>	1. Improve water supply coverage to uncovered areas. 2. Extension of sewerage network to unsaved areas. 3. Reduce Non-Revenue Water (NRW). 4. Conservation of water sources.																												
<b>Customer Service</b>	Average monthly water consumption is about 9m <sup>3</sup> per domestic connection with per capita consumption of 34lts/day. Water is available at an average of 18 hours a day. Water and wastewater quality meets the required standard with overall average compliance of 100%. During the year under review, there were 2294 consumer complaints reported of which 2116 were resolved. The total number of complaints per 1000 connections is 35. The highest proportion of complaints is on billing which makes 22% of total complaints received.																												
<b>Performance Highlights</b>	Mbeya WSSA provides water supply direct to 79% of the population in its service area. NRW at 40% is higher than the recommended levels. Bulk water meters have been installed at all water production points and all customer water connections are metered. Operating and working ratios are 1.19 and 0.95 respectively. Accounts receivables equivalent is unsatisfactory at 5.8 months. Average tariff is TZS 1,175 per m <sup>3</sup> is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 3.5																												

## MBEYA PROFILE

2018/19

### Production/Distribution

Average daily production	45100
Production capacity/day	51446
Treatment type	conventional treatment
Storage capacity	23350m <sup>3</sup>
Length of Water network	767.1km
Length of Sewerage Network	131.814km

### Service Connections

Total water connections	65389
Domestic water connections	62895
Total sewer connections	2389
Domestic sewer connections	2203
Metering ratio	100%

### Service Indicators

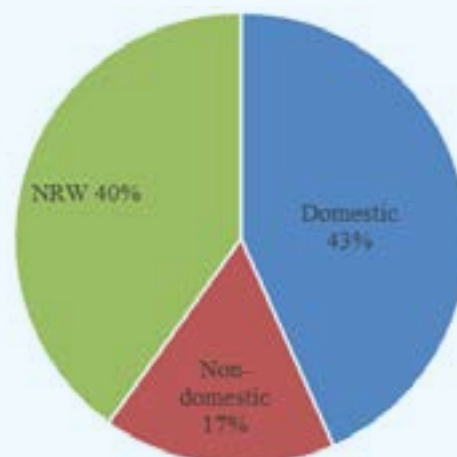
Water Service Coverage	79%
Population directly served	439,394
Service hours	18
Per capita consumption	34.3lts/day
Average Tariff	1,175 TZS/m <sup>3</sup>
Complaints/1000 connection	35.1

### Efficiency Indicators

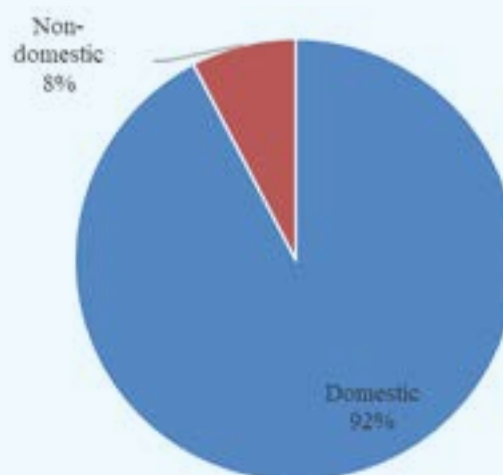
Non-Revenue Water	39%
Revenue collection efficiency	90%
Unit production cost	976 TZS/m <sup>3</sup>
Operating ratio	1.19
Working ratio	0.95
Accounts receivables	1.7
Staff/1000 total connections	3.5.
Number of Sewer Blockage	3 nr/km/year

### Income and Expenditure

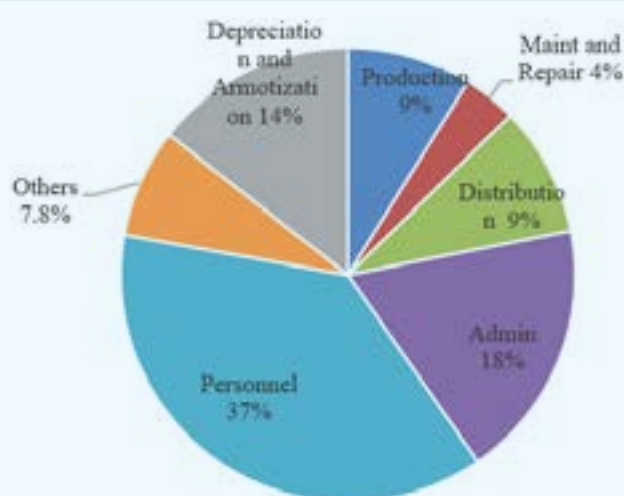
Annual operating income from water and sewerage services	TZS 11,167,269,000.00
Government /Donor Grants	TZS
Amortized Grants	TZS 1,443,724,715.00
Other income	TZS 2,123,946,661.00
<b>TOTAL INCOME</b>	<b>TZS 14,734,940,376.00</b>
Water Production Expenses	TZS 1,920,580,344.00
Water distribution Expenses	TZS 2,002,402,273.00
Maintenance and Repair	TZS 820,763,206.00
Personnel Expenses	TZS 8,115,459,232.00
Administration Expenses	TZS 3,991,678,346.00
Other O&M Expenses	TZS 1,681,646,809.00
<b>Total O&amp;M</b>	<b>TZS 18,532,530,210.00</b>
Depreciation & Amortization	TZS 3,123,492,370.00
<b>ANNUAL EXPENDITURE</b>	<b>TZS 21,656,022,580.00</b>



**ANNUAL WATER USE: 16,118,400m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 8,888,596,314.00**



**ANNUAL EXPENDITURE TZS 21,656,022,580.00**

**MOROGORO WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/11/2011**

Water Utility	Morogoro WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Morogoro Municipality. Morogoro WSSA is classified as Category A water utility and its area of responsibility has a total population of 397,408 as projected from the 2012 census out of whom 305,755 people are served with water by the utility. The Utility draws water from surface gravity sources (Mambogo, Vituli, Mgolole, Kibwe and Kigurunyembe) as well as Mindu dam that constituted 76% of the water abstracted during the year. The combined production capacity is 34,000m³/day while water demand is 59,260m³/day. The Utility has a sewerage system with total length of 41.7 km, serving about 6% of the population. Sewage treatment is done by wastewater stabilization ponds. Morogoro WSSA has 127 staff.				
General Data About Water Utility	Total Water Connections	31,476			
	Active Water Connections	25,668			
	Total sewerage Connections	2,019			
	Total Staff	127			
	Annual O&M Costs	TZS 10,788,890,339.00			
	Annual Water and Sewerage Collections	TZS 9,544,468,396.00			
	Annual Water and Sewerage Billings	TZS 9,863,541,373.00			
Tariff Structure	Water Tariff				
	Category	Domestic	Institutional	Commercial	Industrial
	TZS/m³	1,070	1,265	1,495	1,905
	Note: Water Kiosk tariff is TZS 20 per 20 litre				
	Sewerage Tariff				
	Category	Domestic	Institution	Commercial	Industrial
	TZS per m³ of drinking water	355	510	530	580
Note: Effective date of the tariffs: 1 <sup>st</sup> June 2016					
Priority of Needs	1. Increase water supply service and sewerage coverage. 2. Reduce the number of inactive customers 3. Improve of revenue collection 4. Reduce NRW.				
Customer Service	Average monthly water consumption is about 14m³ per domestic connection with per capita consumption of 34.2lts/day. Water is available at an average of 12 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard due to overloading of the ponds. During the year under review, there were 1,456 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 46.				
Performance Highlights	Morogoro WSSA provides water supply direct to 76.9% of the population in its service area. NRW at 33% is higher than the recommended values. Both bulk meters and estimates are used to ascertain the volume of water produced. All customer water connections are metered. Operating and working ratios are 1.28 and 0.98 respectively. Accounts receivables equivalent is 5.8 months. Average tariff is TZS 1,273 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 5.				

## MOROGORO PROFILE

2018/19

### Production/Distribution

Average daily production	30,903m <sup>3</sup>
Production capacity/day	34,000m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	10,304m <sup>3</sup>
Length of Water network	425.7km
Length of Sewerage Network	41.7km

### Service Connections

Total water connections	31,476
Domestic water connections	29,630
Total sewer connections	2019
Domestic sewer connections	1,691
Metering ratio	100%

### Service Indicators

Water Service Coverage	81%
Population directly served	76.9%
Service hours	12
Per capita consumption	34l/c/d
Average Tariff	1,273 TZS/m <sup>3</sup>
Complaints/1000 connection	46.3

### Efficiency Indicators

Non-Revenue Water	33%
Revenue collection efficiency	101% (arrears included)
Unit production cost	1007 TZS/m <sup>3</sup>
Operating ratio	1.28
Working ratio	0.98
Accounts receivables	5.8
Staff/1000 total connections	5
Number of Sewer Blockage	30 nr/km/year

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 9,863,541,373.00
Government /Donor Grants	TZS 0
Amortized Grants	TZS 0
Other income	TZS 800,143,823.00

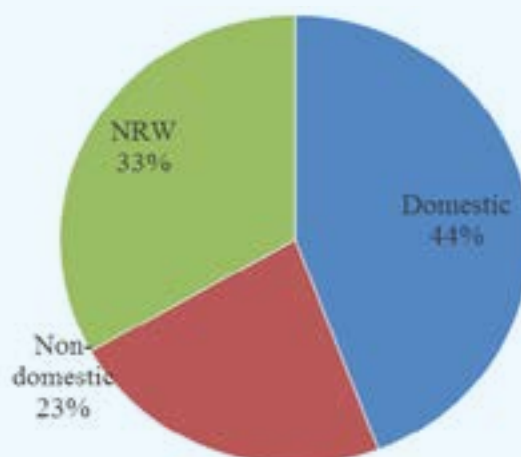
**TOTAL INCOME TZS 10,663,685,196**

Water Production Expenses	TZS 1,965,339,011.00
Water distribution Expenses	TZS 65,723,300.00
Maintenance and Repair	TZS 1,226,475,409.00
Personnel Expenses	TZS 4,697,907,533.00
Administration Expenses	TZS 1,853,803,965.00
Other O&M Expenses	TZS 6,792,875.00

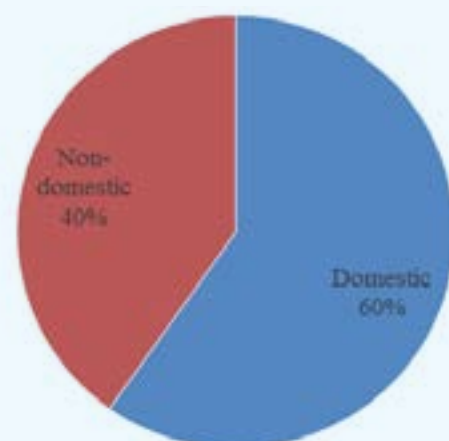
**Total O&M TZS 9,816,042,093.00**

Depreciation & Amortization **TZS 972,848,246.00**

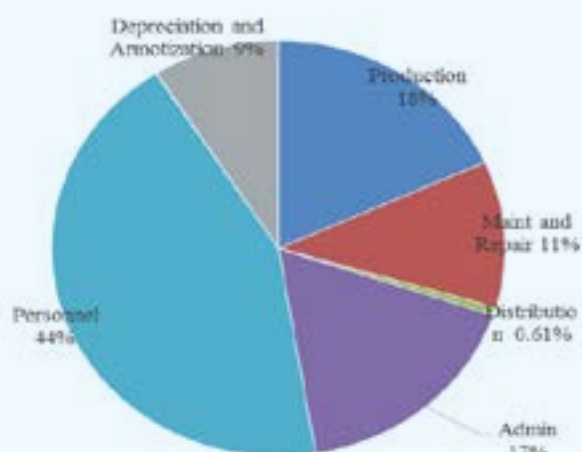
**ANNUAL EXPENDITURE TZS 10,788,890,339**



**ANNUAL WATER USE: 11,279,443 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING TZS 9,863,541,373.00**



**ANNUAL EXPENDITURE TZS 10,788,890,339.00**

**MOSHI WSSA PROFILE**
**2018/19**
**EWURA CLASS I LICENSE NO: WSSSL/01/2017**

<b>Water Utility</b>	Moshi WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Moshi Municipality. Moshi WSSA is classified as Category A water utility and its area of responsibility has a total population of 347,215 as projected from the 2012 census out of whom 339,524 people are served with water by the utility. The utility draws water from ten natural spring sources contributing about 88% of the daily water production and from seven boreholes contributing 10%. The combined production capacity is 48,443m <sup>3</sup> /day while water demand stands at 51,430m <sup>3</sup> /day. The Utility has a water supply network with a total length of 690.1km serving 97.8 and sewerage network with total length of 67km, serving about 28% of the population. Sewage treatment is done by wastewater stabilization ponds. Moshi WSSA has 200 staff and implementing Customer Service Charter approved by EWURA.																																								
<b>General Data About Water Utility</b>	Total Water Connections	36,379																																							
	Active Water Connections	35,009																																							
	Total sewerage Connections	2,888																																							
	Total Staff	200																																							
	Annual O&M Costs	TZS 9,172,819,549.73																																							
	Annual Water and Sewerage Collections	TZS 8,226,293,463.00																																							
	Annual Water and Sewerage Billings	TZS 9,231,393,716.00																																							
<b>Tariff Structure</b>	<b>Water Tariff</b> <table border="1"> <thead> <tr> <th>Category</th><th>Domestic</th><th>Institutional</th><th>Commercial</th><th>Industrial</th><th>Carwash</th></tr> </thead> <tbody> <tr> <td>&gt;10m<sup>3</sup></td><td>695</td><td>695</td><td>825</td><td>930</td><td>930</td></tr> <tr> <td>&gt;10&lt;30</td><td>755</td><td>755</td><td>880</td><td>980</td><td>980</td></tr> <tr> <td>&gt;30</td><td>825</td><td>825</td><td>930</td><td>1,005</td><td>1,005</td></tr> </tbody> </table> <p><b>Note:</b> Water Kiosk tariff is TZS 13.5 per 20litre container</p> <b>Sewerage Tariff</b> <table border="1"> <thead> <tr> <th>Category</th><th>Domestic</th><th>Institution</th><th>Commercial</th><th>Industrial</th><th>Carwash</th></tr> </thead> <tbody> <tr> <td>TZS per m<sup>3</sup> of drinking water</td><td>370</td><td>380</td><td>569</td><td>676</td><td>648</td></tr> </tbody> </table> <p><b>Note: Effective date of the tariffs: 1<sup>st</sup> September 2015.</b></p>					Category	Domestic	Institutional	Commercial	Industrial	Carwash	>10m <sup>3</sup>	695	695	825	930	930	>10<30	755	755	880	980	980	>30	825	825	930	1,005	1,005	Category	Domestic	Institution	Commercial	Industrial	Carwash	TZS per m <sup>3</sup> of drinking water	370	380	569	676	648
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Category	Domestic	Institution	Commercial	Industrial	Carwash																																				
TZS per m <sup>3</sup> of drinking water	370	380	569	676	648																																				
<b>Priority of Needs</b>	1. Reduction of non-revenue water to acceptable level. 2. Application of various debt recovery measures to curb growing debts 3. Awareness to encourage more customers to connect to sewerage service 4. Solicit financing for extension of water supply network to redefined service area																																								
<b>Customer Service</b>	Average monthly water consumption is about 18m <sup>3</sup> per domestic connection with per capita consumption of 58lts/day. Water is available at an average of 24 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard due to overloading of the ponds. During the year under review, there were 1,456 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 203.																																								
<b>Performance Highlights</b>	Moshi WSSA provides water supply direct to 98% of the population in its service area. NRW at 20.3% is slightly higher than the recommended levels. Bulk meters are installed at all water production points and all customer water connections are metered. Operating and working ratios are good at 0.79 and 0.91 respectively. Accounts receivables equivalent is unsatisfactory at 5.4 months. Average tariff is TZS 704 per m <sup>3</sup> is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 5.3.																																								

## MOSHI PROFILE

2018/19

### Production/Distribution

Average daily production	33,227
Production capacity/day	48443m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	9977m <sup>3</sup>
Length of Water network	690.1km
Length of Sewerage Network	66.99km

### Service Connections

Total water connections	36,379
Domestic water connections	33,844
Total sewerage connections	2,888
Domestic sewerage connections	2,079
Metering ratio	100%

### Service Indicators

Water Service Coverage	100%
Population directly served	98%
Service hours	24
Per capita consumption	58l/c/d
Average Tariff	704 TZS/m <sup>3</sup>
Complaints/1000 connection	203

### Efficiency Indicators

Non-Revenue Water	20.3%
Revenue collection efficiency	96%
Unit production cost	746 TZS/m <sup>3</sup>
Operating ratio	0.79
Working ratio	0.91
Accounts receivables	5.4
Staff/1000 total connections	5.3
Number of Sewer Blockage	24 nr/km/year

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 8,026,293,463.00
Government /Donor Grants	TZS
Amortized Grants	TZS 4,830,399.00
Other income	TZS 1,200,269,854.00

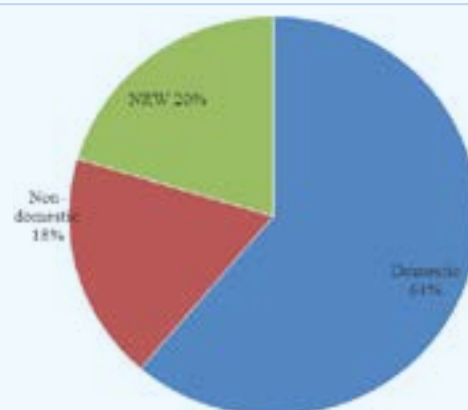
**TOTAL INCOME TZS 9,231,393,716.00**

Water Production Expenses	TZS 473,926,767.88
Water distribution Expenses	TZS 936,767,056.25
Maintenance and Repair	TZS 219,249,713.85
Personnel Expenses	TZS 2,534,617,234.13
Administration Expenses	TZS 1,999,098,526.00
Other O&M Expenses	TZS 284,210,564.36

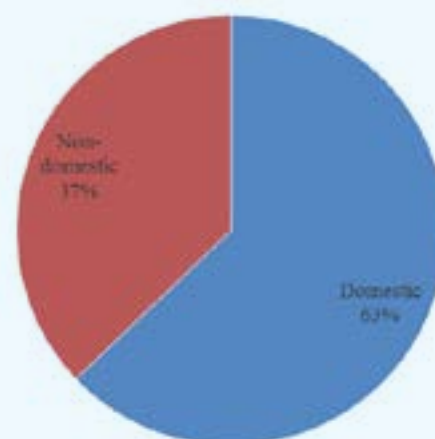
**Total O&M TZS 8,017,653,226.28**

Depreciation & Amortization TZS 1,155,166,323.45

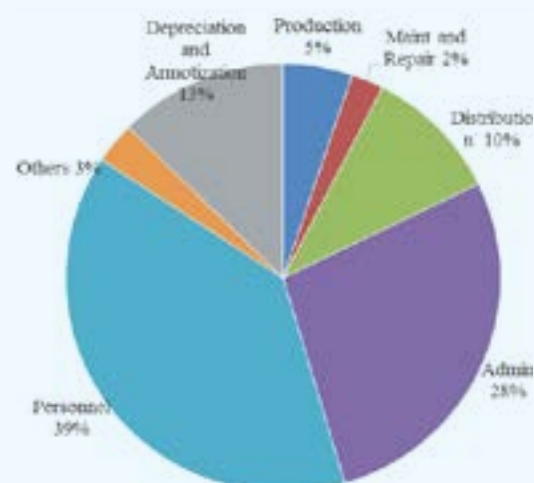
**ANNUAL EXPENDITURE TZS 9,172,819,549.73**



**ANNUAL WATER USE: 12,127,736 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING TZS 8,723,218,109**



**ANNUAL EXPENDITURE TZS 9,172,819,549.73**

**MTWARA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO:WSSSL/12/2011**

Water Utility	Mtwara WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Mtwara Municipality. Mtwara WSSA is classified as Category A water utility and its area of responsibility has a total population of 127,815 as projected from the 2012 census out of whom 98,034 people are served with water by the utility. The utility draws water from boreholes at Mtawanya well field and Mchuchu source. The combined production capacity is 11,500m³/day while water demand stands at 14,160m³/day. The Utility has a water supply network with a tota length of 249.5 km serving 85% of the population. Mtwara WSSA has 54 staff and is implementing Customer Service Charter approved by EWURA.The utility has neither sewerage system nor sewage treatment plant.				
General Data About Water Utility	Total Water Connections	13,057			
	Active Water Connections	10,369			
	Total sewerage Connections	na			
	Total Staff	54			
	Annual O&M Costs	TZS 3,109,139,930.84			
	Annual Water and Sewerage Collections	TZS 4,818,102,725.00			
	Annual Water and Sewerage Billings	TZS 3,268,958,533.00			
Tariff Structure	Water Tariff				
	Category	Domestic	Institution	Commercial	Industrial
	TZS./m³	1,090-1,370	2,000-2,340	2,000-2,400	2,030-2,440
	Flat rate (TZS.)	-		-	-
	<b>Note:</b> Water Kiosk tariff is TZS 20 per 20litre container <b>Effective date of the tariffs: 1<sup>st</sup> January 2019.</b>				
Priority of Needs	1. Extension of water supply network to unserved areas. 2. Construction of sewerage network. 3. Improve revenue collection efficiency. 4. Maintain quality of water supplied to acceptable standards.				
Customer Service	Average monthly water consumption is about 12m³ per domestic connection with per capita consumption of 38lts/day. Water is available at an average of 16 hours a day. Water quality meets the required standard with overall average compliance of 90%. During the year under review, there were 2,285 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 175.				
Performance Highlights	Mtwara WSSA provides water supply direct to 77% of the population in its service area. NRW at 25% is slightly higher than the recommended levels. Bulk meters are installed at all water production points and all customer water connections are metered. Operating and working ratios are good at 0.9 and 0.8 respectively. Accounts receivables equivalent is unsatisfactory at 4.9 months. Average tariff is TZS 1,104 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 5.2.				

## MTWARA PROFILE

2018/19

### Production/Distribution

Average daily production	10,101m <sup>3</sup>
Production capacity/day	11,500m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	3,765m <sup>3</sup>
Length of Water network	249.5km

### Service Connections

Total water connections	13,057
Domestic water connections	12,092
Total sewerage connections	na
Domestic sewerage connections	na
Metering ratio	100%

### Service Indicators

Water Service Coverage	85%
Population directly served	77%
Service hours	16
Per capita consumption	38l/c/d
Average Tariff	1,104 TZS/m <sup>3</sup>
Complaints/1000 connection	175

### Efficiency Indicators

Non-Revenue Water	25%
Revenue collection efficiency	98.7%
Unit production cost	1,082 TZS/m <sup>3</sup>
Operating ratio	0.9
Working ratio	0.8
Accounts receivables	2.6
Staff/1000 total connections	5.8

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 3,066,226,616.00
Government /Donor Grants	TZS
Amortized Grants	TZS 334,100,841.00
Other income	TZS 1,013,287,282.00

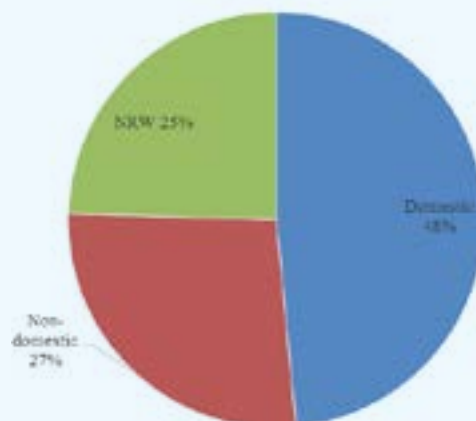
**TOTAL INCOME TZS 4,413,614,739.00**

Water Production Expenses	TZS 935,603,395.00
Water distribution Expenses	TZS 299,226,280.00
Maintenance and Repair	TZ 39,256,060.00
Personnel Expenses	TZS 1,065,690,068.84
Administration Expenses	TZS 762,474,329.00
Other O&M Expenses	TZS 6,889,798.00

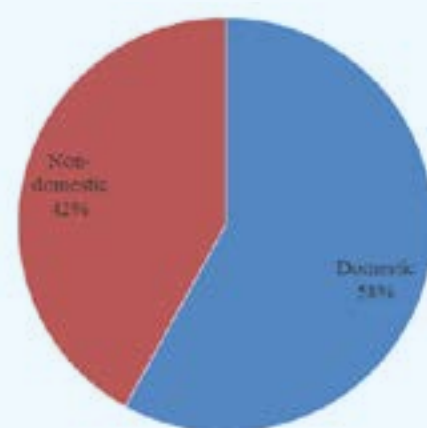
**Total O&M TZS 3,109,139,930.84**

Depreciation & Amortization **TZS 467,137,428.00**

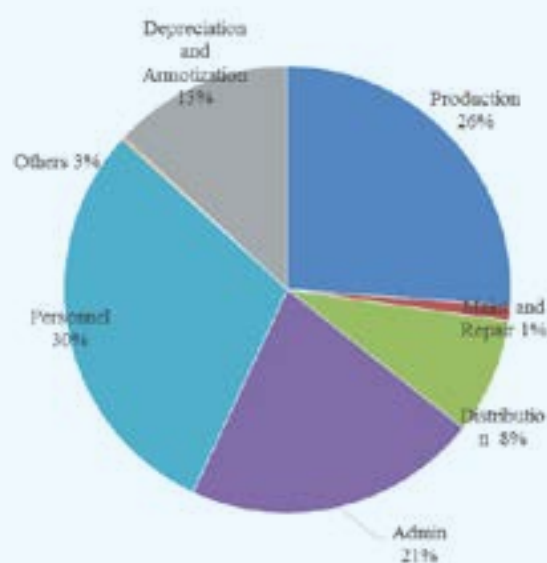
**ANNUAL EXPENDITURE TZS 3,576,277,358.84**



**ANNUAL WATER USE: 3,686,865 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING TZS 3,268,958,533.00**



**ANNUAL EXPENDITURE TZS 3,576,277,358.84**

**MUSOMA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO:WSSSL/02/2011**

Water Utility	Musoma WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Musoma Municipality. Musoma WSSA is classified as Category A water utility and its area of responsibility has a total population of 176,130 as projected from the 2012 census out of whom 142,665 people are served with water by the utility. The utility draws water from 3 Lake Victoria intakes, namely Mwisenge, Mutex and Bweri, Mwisege being the major intake of water produced by Musoma WSSA. The combined production capacity is 36,000m³/day while water demand stands at 18,000m³/day. The utility has neither sewerage system nor sewage treatment plant. However, Musoma WSSA operating a faecal sludge digester. Musoma WSSA has 65 staff.				
General Data About Water Utility	Total Water Connections	15251			
	Active Water Connections	12369			
	Total sewerage Connections	na			
	Total Staff	65			
	Annual O&M Costs	TZS 3,565,385,216.00			
	Annual Water and Sewerage Collections	TZS 2,880,306,598.00			
	Annual Water and Sewerage Billings	TZS 2,948,919,180.00			
Tariff Structure	Water Tariff				
	Category	Domestic	Institution	Commercial	Industrial
	TZS./m³	2,310 – 2,963	3,099 – 3,398	3,505 – 3,815	3,425 – 3,642
	<b>Note:</b> Water Kiosk tariff is TZS 30per 20litre				
	<b>Effective date of the tariffs 4<sup>th</sup> January 2019</b>				
Priority of Needs	1. Reduction of NRW to acceptable levels. 2. Extension of water supply network to unserved areas. 3. Construction of Wastewater treatment facility and sewerage network. 4. Improvement of revenue collection efficiency.				
Customer Service	Average monthly water consumption is about 12m³ per domestic connection with per capita consumption of 32lts/day. Water is available at an average of 22 hours a day. Overall water quality compliance is 90%. During the year under review, there were 780 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 51.				
Performance Highlights	Musoma WSSA provides water supply direct to 81% of the population in its service area. NRW at 60% is higher than the recommended levels. Bulk meters are installed at all water production points and 78% of customer water connections are metered. Operating and working ratios are 1.06 and 1.04 respectively. Accounts receivables equivalent is unsatisfactory at 6.39 months. Average tariff is TZS 1,082 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 4.3.				

## MUSOMA PROFILE

2018/19

### Production/Distribution

Average daily production	18731m <sup>3</sup>
Production capacity/day	36,000m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	9734m <sup>3</sup>
Length of Water network	280.9km

### Service Connections

Total water connections	15,251
Domestic water connections	14240
Total sewerage connections	na
Domestic sewerage connections	na
Metering ratio	78%

### Service Indicators

Water Service Coverage	88%
Population directly served	81%
Service hours	22
Per capita consumption	32l/c/d
Average Tariff	1,081TZS/m <sup>3</sup>
Complaints/1000 connection	51

### Efficiency Indicators

Non-Revenue Water	60%
Revenue collection efficiency	90% (including arrears)
Unit production cost	1,082TZS/m <sup>3</sup>
Operating ratio	1.06
Working ratio	1.04
Accounts receivables	6.39
Staff/1000 total connections	4.3

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 3,066,226,616.00
Government /Donor Grants	TZS
Amortized Grants	TZS 334,100,841.00
Other income	TZS 1,013,287,282.00

### TOTAL INCOME

**TZS 4,413,614,739.00**

Water Production Expenses	TZS 968,474,892.00
Water distribution Expenses	TZS 98,174,995.00
Maintenance and Repair	TZS 169,295,730.00
Personnel Expenses	TZS 1,183,990,664.00
Administration Expenses	TZS 836,328,639.00
Other O&M Expenses	TZS 6,923,444.00

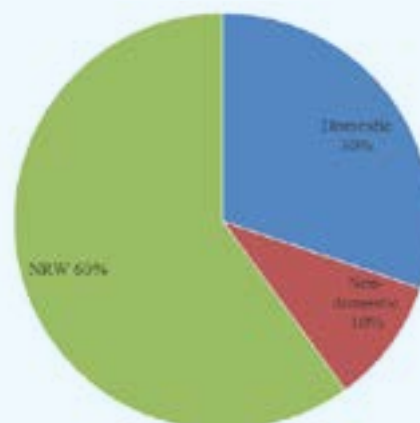
### Total O&M

**TZS 3,263,188,364.00**

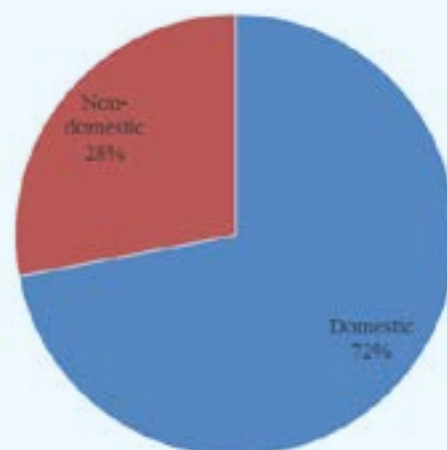
Depreciation & Amortization	TZS 302,196,852.00
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### ANNUAL EXPENDITURE

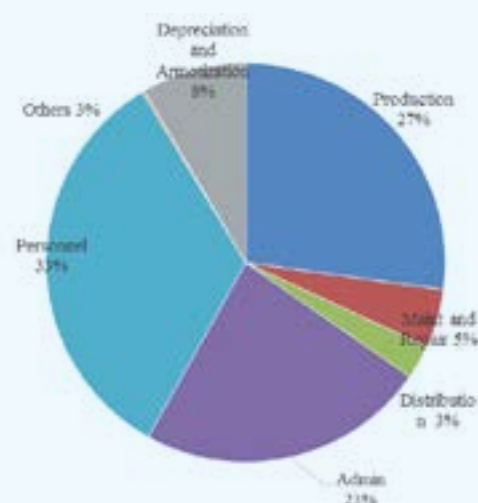
**TZS 3,565,385,216.00**



**ANNUAL WATER USE: 6,836,743 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 3,066,226,616**



**ANNUAL EXPENDITURE TZS 3,565,385,216.00**

**MWANZA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/01/2011**

Water Utility	Mwanza WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Mwanza City. Mwanza WSSA is classified as Category A water utility and its area of responsibility has a total population of 1,109,361 as projected from the 2012 census out of whom 987,331.29 people are served with water by the utility. The utility draws water from Lake Victoria at three different intakes namely, Capri point, Chakula Barafu and Luchelele. The combined production capacity is 108,000m³/day while water demand is 11,2192m³/day. The Utility has a sewerage system with total length of 107.49km, serving about 23% of the population. Sewage treatment is done by wastewater stabilization ponds. Mwanza WSSA has 312 staff. Mwanza WSSA is implementing Customer Service Charter approved by EWURA						
General Data About Water Utility	Total Water Connections	81,310					
	Active Water Connections	78,577					
	Total sewerage Connections	4,657					
	Total Staff	312					
	Annual O&M Costs	TZS 24,281,571,485.00					
	Annual Water and Sewerage Collections	TZS 23,201,585,712.00					
	Annual Water and Sewerage Billings	TZS 3,066,226,616.00					
Tariff Structure	Water Tariff						
	Category	Domestic	Institutional	Commercial	Industrial	Bottling	Construction
	TZS./m³	700-900	925	1,345	1,680	2,850	1,680
	Note: Water Kiosk tariff is TZS 13.5 per 20litre container						
	Sewerage Tariff						
	Category	Domestic	Institution	Commercial	Industrial	Bottling	Construction
	TZS per m³ of drinking water	305-390	395	575	720	1,220	720
Note: Effective date of the tariffs: 1 <sup>st</sup> February 2016.							
Priority of Needs	1. Extension of sewerage network and public awareness to increase customer connection. 2. Reduction of non-revenue water to acceptable level. 3. Maintain the quality of water supplied. 4. Treatment of sewage to acceptable levels.						
Customer Service	Average monthly water consumption is about 13m³ per domestic connection with per capita consumption of 30lts/day. Water is available at an average of 22 hours a day. Water quality meets the required standard with overall average compliance of 100%. However, wastewater effluents do not meet required standard due to overloading of the ponds. During the year under review, there were 11,324 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 139.						
Performance Highlights	Mwanza WSSA provides water supply direct to 74% of the population in its service area. NRW at 37% is higher than the recommended levels. Water production is estimated as they have not installed bulk meters however all customer water connections are metered. Operating and working ratios are 1.1 and 1 respectively. Accounts receivables equivalent is satisfactory at 2.2 months. Average tariff is TZS 972 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 4.7.						

## MWANZA PROFILE

2018/19

### Production/Distribution

Average daily production	79131 m <sup>3</sup>
Production capacity/day	108,000m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	36,857m <sup>3</sup>
Length of Water network	788.8km

### Service Connections

Total water connections	81,310
Domestic water connections	74,853
Total sewerage connections	4,657
Domestic sewerage connections	3702
Metering ratio	100%

### Service Indicators

Water Service Coverage	92%
Population directly served	74%
Service hours	22
Per capita consumption	35l/c/d
Average Tariff	1,060 TZS/m <sup>3</sup>
Complaints/1000 connection	112

### Efficiency Indicators

Non-Revenue Water	37%
Revenue collection efficiency	104.6%
Unit production cost	1082TZS/m <sup>3</sup>
Operating ratio	0.97
Working ratio	0.92
Accounts receivables	2.33
Staff/1000 total connections	3.6

### Income and Expenditure

Annual operating income from water and sewerage services	TZS3,066,226,616.00
Government /Donor Grants	TZS
Amortized Grants	TZS 1,690,605,549.00
Other income	TZS 2,191,021,932.00

### TOTAL INCOME

**TZS 6,947,854,097.00**

Water Production Expenses	TZS 7,369,916,314.00
Water distribution Expenses	TZS 992,657,291.00
Maintenance and Repair	TZS 581,826,638.00
Personnel Expenses	TZS 7,895,857,520.00
Administration Expenses	TZS 3,374,461,761.00
Other O&M Expenses	TZS 753,832,909.00

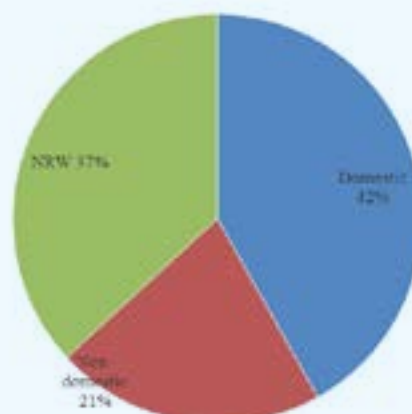
### Total O&M

**TZS 20,968,552,433.00**

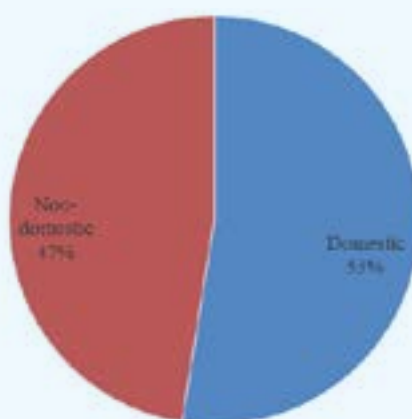
Depreciation & Amortization	TZS 3,313,019,052.00
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### ANNUAL EXPENDITURE

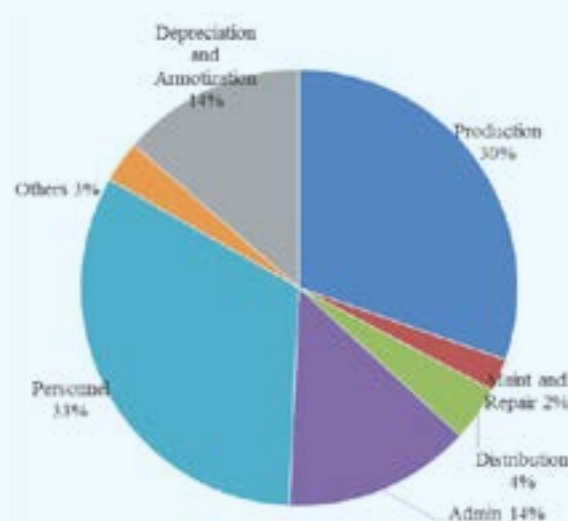
**TZS 24,281,571,485.00**



**ANNUAL WATER USE: 28,882,933 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 3,066,226,616**



**ANNUAL EXPENDITURE TZS 24,281,571,485.00**

**SHINYANGA WSSA PROFILE**  
**EWURA CLASS III LICENSE NO: WSSSL/01/2011**
**2018/19**

Water Utility	Shinyanga WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Shinyanga Municipality. Shinyanga WSSA is classified as Category A water utility and its area of responsibility has a total population of 190,535 as projected from the 2012 census out of whom 108,084 people are served with water by the utility. The utility depends mainly on bulk water purchase from KASHWASA as its source of water supply. However, it continued to operate its own water source - the Ningh’wa dam as additional water supply, and also to keep the source functional as a standby water supply in case of failures of the bulk water supply. The combined production capacity is 47,700m³/day while water demand is 11256m³/day. The utility has neither sewerage system nor sewage treatment plant. Shinyanga WSSA has 88 staff. Shinyanga WSSA is implementing Customer Service Charter approved by EWURA.						
General Data About Water Utility	Total Water Connections	20,851					
	Active Water Connections	20,291					
	Total sewerage Connections	NA					
	Total Staff	88					
	Annual O&M Costs	TZS 5,751,175,623.00					
	Annual Water Collections	TZS 5,532,316,075.00					
	Annual Water Billings	TZS 4,435,650,975.00					
Tariff Structure	Water Tariff						
	Category	Domestic	Institutional	Commercial	Industrial	Bottling	Kiosks
	TZS./m³	1,360 – 1,580	2,550	2,600	2,640	3,500	1,250
	<b>Note:</b> Water Kiosk tariff is TZS 25 per 20litre <b>Effective date of the tariffs:</b> 1 <sup>st</sup> September, 2015						
Priority of Needs	1. Construction of wastewater stabilization ponds and sewerage system 2. Extension of water supply network. 3. Rehabilitation of Ning’wa treatment plant.						
Customer Service	Average monthly water consumption is about 11m³ per domestic connection with per capita consumption of 38lts/day. Water is available at an average of 23 hours a day. Water quality meets the required standard with overall average compliance of 100%. During the year under review, there were 1,041 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 49.						
Performance Highlights	Shinyanga WSSA provides water supply direct to 56.7% of the population in its service area. NRW at 13% is within the recommended levels. All water production points have bulk meters and all customer water connections are metered. Operating and working ratios are 1.08 and 0.91 respectively. Accounts receivable equivalent is satisfactory at 3.4months. Average tariff is TZS 1,836 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is 4. .						

## SHINYANGA PROFILE

2018/19

### Production/Distribution

Average daily production	11,257m <sup>3</sup>
Production capacity/day	47,700m <sup>3</sup>
Treatment type	conventional treatment
Storage capacity	22,077m <sup>3</sup>
Length of Water network	542.8 km
Length of sewerage network	N/A

### Service Connections

Total water connections	20,851
Domestic water connections	19,536
Total sewerage connections	N/A
Domestic sewerage connections	N/A
Metering ratio	100%

### Service Indicators

Water Service Coverage	82%
Population directly served	72%
Service hours	23
Per capita consumption	38l/c/d
Average Tariff	1,836 TZS/m <sup>3</sup>
Complaints/1000 connection	56

### Efficiency Indicators

Non-Revenue Water	13%
Revenue collection efficiency	82.7%
Unit production cost	1,548TZS/m <sup>3</sup>
Operating ratio	1.08
Working ratio	0.91
Accounts receivables	3.4
Staff/1000 total connections	4

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 4,435,650,975.00
Government /Donor Grants	TZS
Amortized Grants	TZS 130,736,538.00
Other income	TZS 1,528,486,257.00

### TOTAL INCOME

**TZS 6,094,873,770.00**

Water Production Expenses	TZS 2,119,009,130.00
Water distribution Expenses	TZS 217,079,210.00
Maintenance and Repair	TZS 14,166,656.00
Personnel Expenses	TZS 1,601,532,216.00
Administration Expenses	TZS 733,356,566.00
Other O&M Expenses	TZS 14,613,240.00

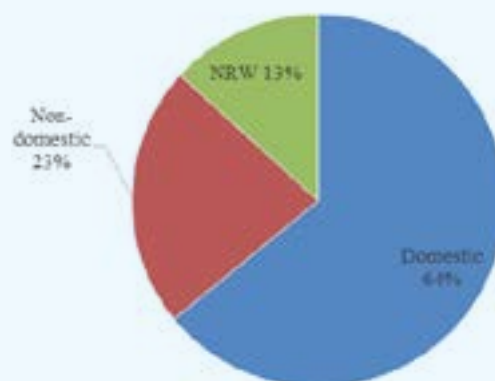
### Total O&M

**TZS 4,827,260,018.00**

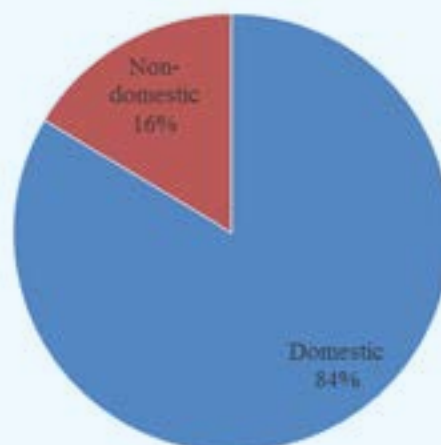
Depreciation & Amortization	TZS 923,915,605.00
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### ANNUAL EXPENDITURE

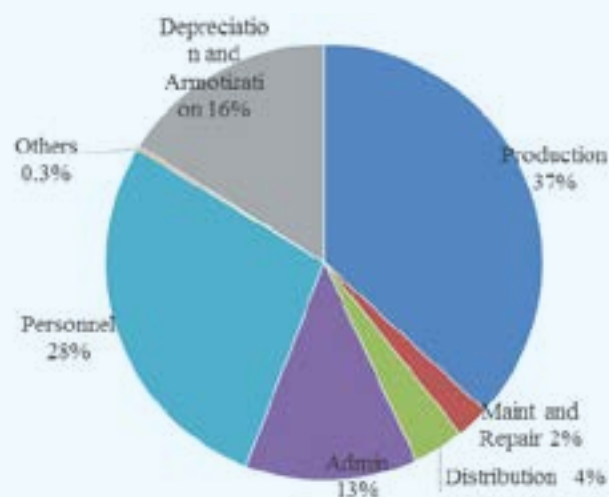
**TZS 5,751,175,623.00**



**ANNUAL WATER USE: 4,108,656 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 4,435,650,975.00**



**ANNUAL EXPENDITURE TZS 5,751,175,623.00**

**SONGEA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/08/2011**

<b>Water Utility</b>	Songea WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Songea Municipality. Its area of operation has a total population of 197,961. Current directly served population is 163,692 equivalent to 83% of total population in service area. Proportion of Population Living in the area with water network is 89%. The utility draws water from spring and rivers. Total Length of Water Network is 441km. The Utility has a sewerage system with a sewer line length of 37 km and sewage treatment is by waste stabilization ponds. The average daily flow into ponds is 1,170m <sup>3</sup> /day. Songea WSSA has a total of 53 staff				
<b>General Data About Water Utility</b>	Total water connections	16,373			
	Active water connections	13,678			
	Total sewerage connections	1,419			
	Total staff	52			
	Annual O&M costs	TZS 2,866,313,713.00			
	Annual water and sewerage collections	TZS 3,023,598,339.00			
	Annual water and sewerage billing	TZS 2,948,872,692.00			
<b>Tariff Structure</b>	<b>Water Tariff</b>				
	<b>Category</b>	<b>Domestic</b>	<b>Institutional</b>	<b>Commercial</b>	<b>Industrial</b>
	Consumption band	TZS/m <sup>3</sup>	TZS/m <sup>3</sup>	TZS/m <sup>3</sup>	TZS/m <sup>3</sup>
	0 - 10	1,000			
	10 -25	1,100	1,060	1,050	1,150
	>25	1,150	1150	1,150	1,250
	<b>Notes:</b> The Charges at water Kiosks are TZS 10 per 20 litre bucket.				
	<b>Sewerage Tariff</b>				
	<b>Category</b>	<b>Domestic</b>	<b>Institution</b>	<b>Commercial</b>	<b>Industrial</b>
	TZS/m <sup>3</sup> of water consumed	400	625	650	650
Effective date of tariff: 1 <sup>st</sup> October, 2018					
<b>Priority of Needs</b>	1. Increase water production. 2. Increase the water treatment plant capacity. 3. Expand the water distribution network to enable an addition of customers. 4. Improve Revenue collection.				
<b>Customer Service</b>	Average monthly consumption is about 10m <sup>3</sup> per connection, with per capita consumption of 39lts/day. Water is available at an average of 23 hours per day. Water quality compliance with WHO set standards is reported to be good with 100% overall compliance. There were 2,957 customer complaints reported and all complaints were resolved. The total number of complaints per 1000 connections is 181 and 59% of the total complaints were on leakages.				
<b>Performance Highlights</b>	Songea WSSA provides direct water supply to 91% of the population living in the area with water network. NRW has increased and currently stands at 20%. Bigger portions of customers are metered with current metering ratio at 99%. Operating ratio stands at 0.9 and Accounts receivable is equivalent to 4.1months. The number of staff per 1000 total connections ratio stands at 3.				

## SONGEA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	8,130 m <sup>3</sup>
Production capacity/day	11,500m <sup>3</sup>
Treatment type	Chlorination
Storage capacity	4,160m <sup>3</sup>
Length of distribution network	451km
Length of sewerage network	37.27km

### Service Connections

Total water connections	16,373
Domestic water connections	15,429
Total sewer connections	1,419
Domestic sewer connections	1,198
Metering ratio	99%

### Service Indicators

Water service coverage	94%
Population directly served	91
Average service hours	23
Per capita consumption	39lts/c/d
Average tariff	TZS 1,077/m <sup>3</sup>
Complaints/1000 connections	181

### Efficiency Indicators

Non-revenue water	20%
Revenue collection efficiency	108% (including arrears)
Unit production costs	TZS 914.1/m <sup>3</sup>
Operating ratio	0.9
Working Ratio	0.7
Account receivable	4.1 months
Staff/1000 connections	3
Number of sewer blockage	14 Nr/km/year

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 2,782,937,080.00
Government /Donor Grants	TZS 82,638,897.00
Amortized Grants	NIL
Other income	TZS 865,177,495.00

### TOTAL INCOME

**TZS 3,730,753,472.00**

Water Production Expenses	TZS 242,988,841.00
Water distribution expenses	TZS 16,672,929.00
Maintenance and Repair	TZS 109,228,676.00
Personnel Expenses	TZS 1,697,968,453.00
Administration Expenses	TZ 487,188,120.00
Other O&M Expenses	TZS 312,266,694.00

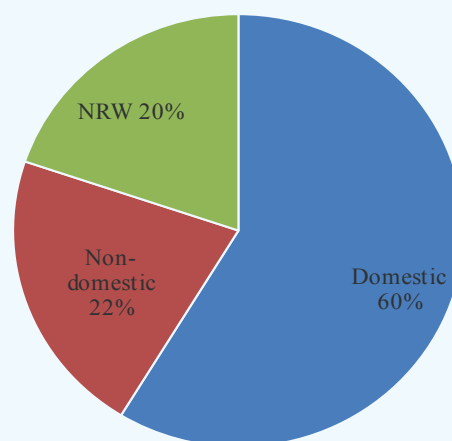
### Total O&M expenses

**TZS 2,866,313,713.00**

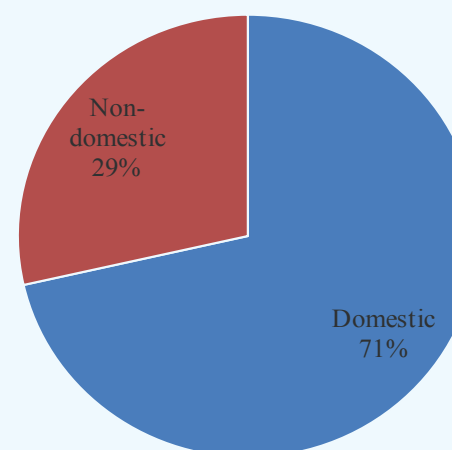
Depreciation & Amortization	TZS 537,750,163.00
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### ANNUAL EXPENDITURE

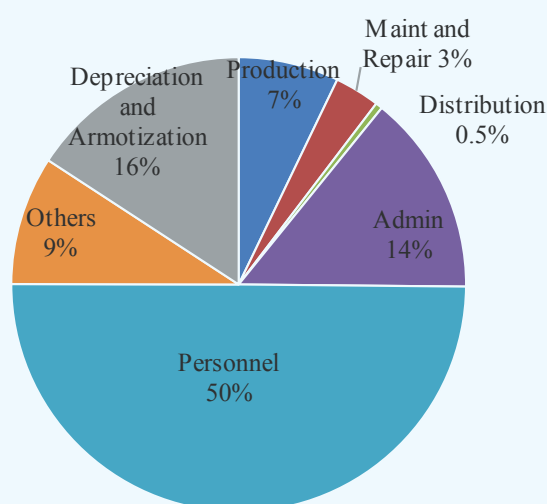
**TZS 3,404,063,876.00**



**ANNUAL WATER USE: 2,967,472 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 2,782,937,080.00**



**ANNUAL EXPENDITURE TZS 3,404,063,876.00**

**TABORA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/18/2011**

Water Utility	Tabora WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Tabora Municipality. Its area of operation has a total population of 276,523 out of whom 254,401 people are living in the area with water network. 232,279 people are directly served with water, which is equivalent to 78% of the total population in Tabora Municipality. Almost all of the water supply in Tabora comes from Igombe dam; a small proportion of the production comes from Kazima dam . The combined water produced from all sources during the reporting period was 5,280,691m³ which was 49% of the town’s water demand of 10,744,870m³ /year. Produced water is treated at respective sources (Igombe and Kazima), and the produced water is of satisfactory quality with compliance level of 87%. Tabora Municipal residents receive water for an average of 19 hours per day; the supply is from three storage tanks with capacity of 5,865m³. With regard to wastewater, Tabora WSSA sewer network is 21km length, covering only 6% of the Tabora Municipal population. Tabora WSSA has a total of 91 staff.					
General Data About Water Utility	Total water connections	19691				
	Active water connections	15,431				
	Total sewerage connection	454				
	Total staff	91				
	Annual O&M costs	TZS 6,618,265,218.08				
	Annual water and sewerage collections	TZS 4,419,013,796.51				
	Annual water and sewerage billings	TZS 4,736,237,461.00				
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Industrial	
	TZS./m³	1,020 – 1,355	1,200 -1,275	1,685-2,180	2,180 -2,295	
	Note: Kiosk tariff is 1,000 TZS/m³					
	Sewerage Tariff					
	Category	Domestic	Institution	Commercial	Industrial	
	TZS/m³	355	750	750	900	
	Effective date of the tariffs: 1 <sup>st</sup> May 2019.					
	Priority of Needs	1. Increase water supply service coverage.				
		2. Extension of sewerage services coverage				
3. Improve revenue collection efficiency						
4. Managing receivables						
5. Inadequate water production						
Customer Service	Average daily per capita consumption of 21 liters. Water is available at an average of 19 hours a day .Water quality is satisfactory. There were 1,877 customer complaints reported and 1,877 complaints were resolved. The complaints were related to lack of water/pressure					
Performance Highlights	Tabora WSSA provides water supply direct to 78% of the population in its service area. All customers are metered thus having a metering ratio of 100%. Operating ratio stands at 1.27 and working ratio is 1.13. Average tariff stands at TZS. 1,306.00 per m³ which covers operating expenses. The ratio of staff per 1000 total connections ratio is 6.					

## TABORA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	14467.65m <sup>3</sup>
Production capacity/day	32,000m <sup>3</sup>
Treatment type	Conventional
Storage capacity	5,865m <sup>3</sup>
Length of distribution network	357.4km
Length of sewerage network	20.72km

### Service Connections

Total water connections	19,691
Domestic waterage connections	18,556
Total Sewerage connections	454
Domestic Sewerage connections	362
Metering ratio	100%

### Service Indicators

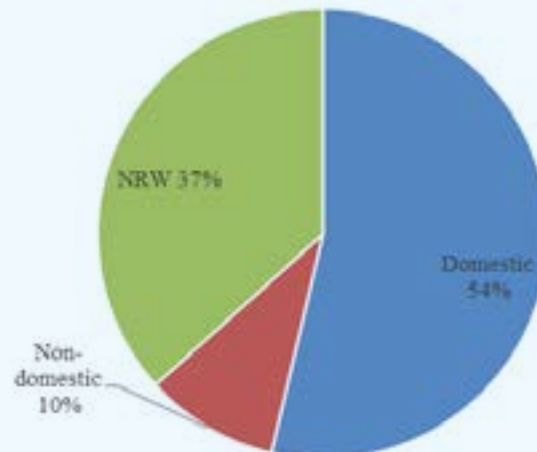
Water service coverage	79%
Population directly served	78
Average service hours	19
Per capita consumption	19lts/c/d
Average tariff	TZS 1,/m <sup>3</sup>
Complaints/1000 connections	130

### Efficiency Indicators

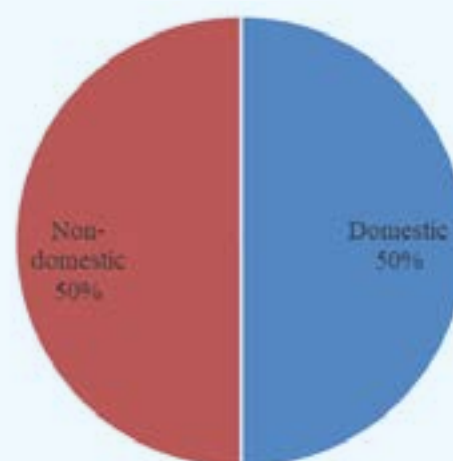
Non-revenue water	37%
Unit production costs	TZS 1,366/m <sup>3</sup>
Operating ratio	1.27
Working ratio	1.13
Accounts receivables	8 months
Staff/1000 connections	6
Number of sewer blockage	12.26 nr/km/year

### Income and Expenditure

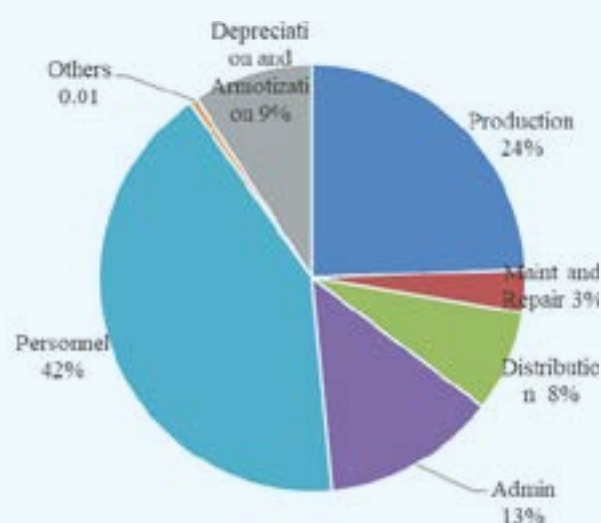
Annual operating income from water and sewerage services	TZS 4,736,237,461.00
Government /Donor Grants	TZS -
Amortized Grants	TZS -666,932,615.28
Other income	TZS 1,320,546,720.00
<b>TOTAL INCOME</b>	<b>TZS 6,720,716,796.28</b>
Water Production Expenses	TZS 1,773,949,063.00
Water distribution expenses	TZS 559,594,044.00
Maintenance and Repair	TZS 235,741,457.00
Personnel Expenses	TZS 3,042,367,464.00
Administration Expenses	TZS 964,962,610.00
Other O&M Expenses	TZS 41,650,581.00
<b>TOTAL O&amp;M EXPENSES</b>	<b>TZS 6,618,265,218.08</b>
Depreciation & Amortization	TZS 663,932,615.00
<b>ANNUAL EXPENDITURE</b>	<b>TZS 6,618,265,218.08</b>



**ANNUAL WATER USE: 5,280,691 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 4,736,237,461.00**



**ANNUAL EXPENDITURE TZS 6,618,265,218.08**

**TANGA WSSA PROFILE**
**2018/19**
**EWURA CLASS I LICENSE NO: WSSSL/02/2016**

Water Utility	Tanga WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in the Tanga City. Tanga WSSA is classified as a Category A water utility and its area of responsibility has a total population of 309,252 people of which 295,980 are served with the utility. The installed production capacity is 45,800m³/day while water demand stands at 32,512m³/ day The utility has a sewerage system with sewer line length of 35.92km with no treatment system, sewage is discharged directly into the Indian Ocean. Tanga WSSA has a total of 170 staff and is implementing Customer Service Charter approved by EWURA.					
General Data About Water Utility	Total water connections	39,646				
	Active water connections	37,651				
	Total sewerage connections	2,805				
	Total staff	170				
	Annual O&M costs	TZS 10,387,282,024				
	Annual water and sewerage collections	TZS 12,448,577,512.0				
	Annual water and sewerage billings	TZS 12,890,274,910				
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Industrial	Big Consumer
	Consumption band	TZS/m³	TZS/m³	TZS/m³	TZS/m³	TZS/m³
	0 - 5	1,550	1,550			1,900
	>5 -10	1,635	1,635	1,900		
	>10 - 30	1,810	1,810	2,070	1,935	
	>30	2,070	2,070	2,250	2,425	
	Notes: The Charges at water Kiosks are TZS 12.5 per 20litre bucket.					
	Sewerage Tariff					
	Category	Domestic	Institution	Commercial	Industrial	
	TZS per m3 of drinking water	TZS/m3	TZS/m³	TZS/m3	TZS/m3	
		450	800	600	850	
Effective date of the tariffs: 1 <sup>st</sup> October, 2018						
Priority of Needs	1. Construction of waste water treatment facility 2. Replacement of old pipes 3. Improvement of sewerage coverage					
Customer Service	Average monthly consumption is about 12.8m³ per domestic connection with per capita consumption of 89.6 litres. Water is available at an average of 23.6 hours per day. Water quality is good, with overall average compliance of 100%. There were 5,444 customer complaints reported and 99% were resolved. The highest proportion of complaints is on billing issues which makes 36% of complaints received. There were 137.3 customer complaints per 1000 connections.					
Performance Highlights	Tanga WSSA provides water supply direct to 91% of the population in its service area at an average of 23.6 hours a day. The Non-Revenue water is at 28%. All production points and service connections are metered. Operating ratio is satisfactory at 0.91 while working ratio is 0.75. Accounts receivable equivalent to 4.0. Weighted average tariff stood at TZS 1,798 per m³ which is fair and enough to cover operating expenses and part of investment. The number of staff per 1000 connections is good at 4.0.					

## TANGA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	29,145m <sup>3</sup>
Production capacity/day	45,840m <sup>3</sup>
Treatment type	Conventional
Storage capacity	10,070m <sup>3</sup>
Service area	474km <sup>2</sup>
Distribution pipe network	695.6km

### Service Connections

Total water connections	39,646
Domestic water connections	37,651
Total Sewer connections	2,805
Domestic sewer connections	2,520
Metering ratio	100%

### Service Indicators

Water service coverage	97%
Population directly served	91%
Service hours	23 hrs
Per capita consumption	89.6 l/c/d
Average tariff	1,798 TZS/m <sup>3</sup>
Complaints/1000 connection	137.3

### Efficiency Indicators

Non-Revenue water	28%
Revenue collection efficiency	95%
Unit production cost	976.4 TZS/m <sup>3</sup>
Operating ratio	0.91
Working ratio	0.75
Account receivable	4.0
Staff/1000 connections	4.0

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 13,384,309,494.00
Government /Donor Grants	
Amortized Grants	

Other income TZS 846,058,251.00

**TOTAL INCOME TZS 14,230,367,745.00**

Water Production Expenses TZS 1,522,924,374.00

Water distribution expenses TZS 381,668,927.00

Maintenance and Repair TZS 137,861,484.00

Personnel Expenses TZS 4,360,328,829.00

Administration Expenses TZ 2,941,921,709.00

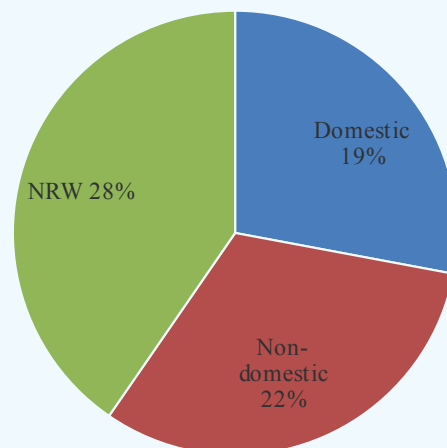
Sewerage expenses TZS 75,117,204.00

Other O&M Expenses TZS 556,606,254.00

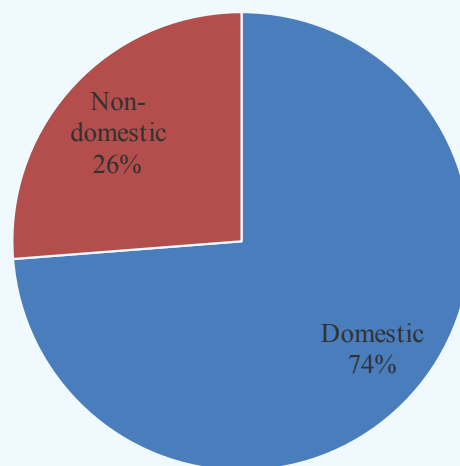
**Total O&M expenses TZS 10,387,282,024.00**

Depreciation & Amortization TZS 2,146,263,256.00

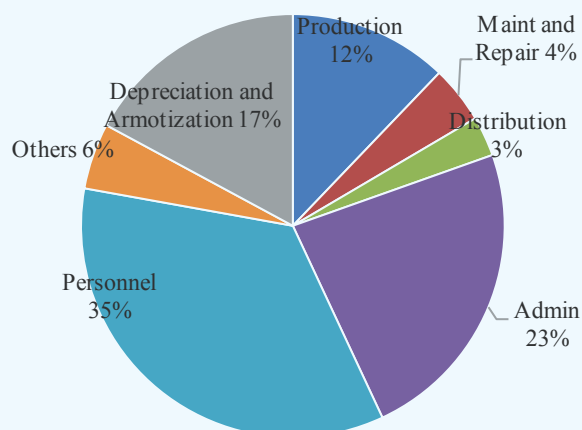
**ANNUAL EXPENDITURE TZS 12,533,545,280.00**



**ANNUAL WATER USE: 10,637,918 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING TZS 13,384,309,494**



**ANNUAL EXPENDITURE TZS 12,533,545,280.00**





**BUKOKA WSSA PROFILE**  
**EWURA CLASS III LICENSE NO: WSSSL/09/2011**
**2018/19**
**Water Utility**

Bukoba Water Supply and Sanitation Authority (Bukoba WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services in the Bukoba Town. Its area of operation has a total population of 162,500 people while served population is 82,039 people (About 137,475 people are living in area with water network). The utility draws water from 4 springs, one river intake and one intake at Lake Victoria. The combined production capacity is 18,000m<sup>3</sup>/day. Water services are available at an average of 22 hours per day. The Utility does not have sewerage system and sewage treatment plant. The utility have faecal sludge wastewater sludge and a cesspit emptier truck. Sanitation services are operated in collaboration with Bukoba District Council. BukobaWSSA has water quality monitoring program, of which it employs water quality laboratory services from Bukoba regional water quality laboratory to audit the quality of water. Bukoba WSSA has a total work force of 59.

**General Data About Water Utility**

Total Water Connections	10,580
Active Water Connections	9,215
Total Sewerage Connections	-
Total Staff	55
Annual O&M Costs	TZS 3,952,096,813.00
Annual Water and Sewerage Collections	TZS 2,073,138,456.00
Annual Water and Sewerage Billings	TZS 2,461,597,687.00

**Tariff Structure**
**Water Tariff**

Category	Domestic	Institutional	Commercial	Industrial
Consumption band	TZS/m <sup>3</sup>	TZS/m <sup>3</sup>	TZS/m <sup>3</sup>	TZS/m <sup>3</sup>
0 - 5	1570	1,810	1,860	2,200
>5 -10	1600			
>10	1,630			

**Notes:** The Charges at water Kiosks are TZS 30 per 20 litre bucket.  
 Effective date of the tariffs: 1st January, 2019.

**Priority of Needs**

1. Utilization of the available water production capacity to increase water production
2. Reduction of high NRW
3. Improvement of water service coverage.
4. Increase of operating income to match expenditures
5. Improvement of revenue collections (reduce high receivables).

**Customer Service**

Average monthly consumption is about 9m<sup>3</sup> per domestic connection with a per capita consumption of 20lts/capita/day. Water is available at an average of 22 hours a day. The quality of water meets the required standard in which the overall average compliance during the year was 96%. There were 2,767 consumer complaints recorded in which 2,767 complaints were resolved on time. The total number of complaints per 1000 connections is 262. Most of the complaints reported are related to water leakages, which constituted about 65% of the total reported complaints.

**Performance Highlights**

Bukoba WSSA provides water supply direct to 59% of the population in its service area. The reported NRW is still high at 53%. Operating and Working ratios are unsatisfactory at 1.45 and 1.93 respectively. Accounts receivable equivalent is extremely high at 2.8 months which is far away from the best practice of below 2 months. Average tariff at TZS 1,613 per m<sup>3</sup> is sufficient to cover all operating expenses and part of investment. Staff/1000 connections ratio is efficiently low at 5.3.

## BUKOBA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	7,529 m <sup>3</sup>
Production capacity/day	18,000m <sup>3</sup>
Treatment type	Conventional
Storage capacity	5,605m <sup>3</sup>
Length of Water network	140km
Length of sewerage network	0km

### Service Connections

Total water connections	10,580
Domestic water connections	9,622
Metering ratio	94.6%

### Service Indicators

Water service coverage	85%
Population directly served	59%
Service hours	22
Per capita consumption	30l/c/d
Average Tariff	1,380 TZS/m <sup>3</sup>
Complaints/1000 connection	262

### Efficiency Indicators

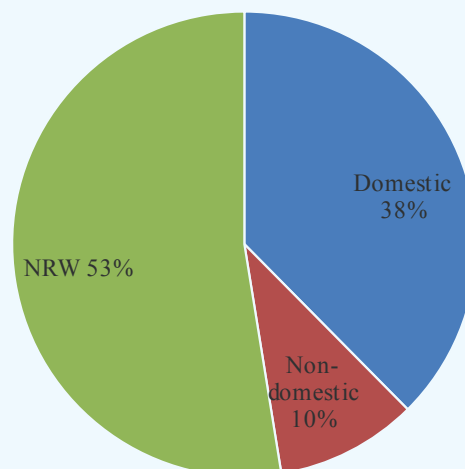
Non-Revenue Water	53%
Revenue collection efficiency	84.2% (including arrears)
Unit production cost	1,438 TZS/m <sup>3</sup>
Operating ratio	1.45
Working ratio	1.93
Account receivable	2.8
Staff/1000 total connections	5.3

### Income and Expenditure

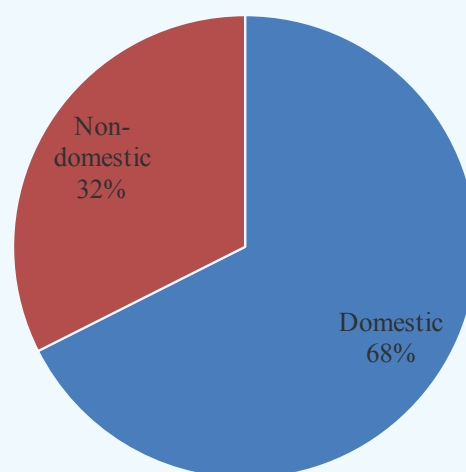
Annual operating income from water and sewerage services	TZS 2,461,597,687.00
Government /Donor Grants	TZS 1,253,954,571.00
Amortized Grants	TZS
Other income	TZS 35,575,000.00
<b>TOTAL INCOME</b>	<b>TZS 5,259,993,787.00</b>

Water Production Expenses	TZS 483,647,231.00
Water distribution Expenses	TZS 538,315,109.00
Maintenance and Repair	TZS 225,498,973.00
Personnel Expenses	TZS 817,913,860.00
Administration Expenses	TZS 1,832,191,214.00
Other O&M Expenses	TZS 45,253,176.00
<b>Total O&amp;M</b>	<b>TZS 3,952,096,813.00</b>
Depreciation & Amortization	TZS 1,290,278,969.00

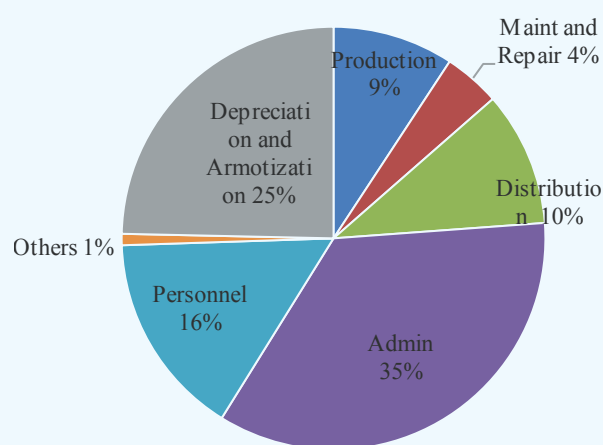
**ANNUAL EXPENDITURE TZS 5,242,375,782.00**



**ANNUAL WATER USE: 2,748,120 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING TZS 2,461,597,687.00**



**ANNUAL EXPENDITURE TZS 5,242,375,782.00**

**KIGOMA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/04/2011**

Water Utility	Kigoma Water Supply and Sanitation Authority (Kigoma WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services in the Kigoma Town. Its area of operation has a total population of 244,006 people while the served population is 209,000 people The utility draws water from the Lake Tanganyika intake. The intake has a production capacity of 18,000m³/day. Water services are available at an average of 17 hours per day. The Utility does not have sewerage system and sewage treatment plant. Sanitation services are operated under the supervision of Kigoma District Council. KigomaWSSA has water quality monitoring program. Kigoma WSSA has a total work force of 46.					
General Data About Water Utility	Total Water Connections	11,002				
	Active Water Connections	10,314				
	Total Sewerage Connections	-				
	Total Staff	46				
	Annual O&M Costs	TZS 1,954,268,000				
	Annual Water and Sewerage Collections	TZS 1,563,727,000				
	Annual Water and Sewerage Billings	TZS 1,737,207,090				
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Industrial	Water Bowser
	Consumption band	TZS/m³	TZS/m³	TZS/m³	TZS/m³	TZS/m³
	0 - 10	1,300	1700	1800	1,800	
	>10 -20	1,400				
	>20	1,500				
	Note: The charges at water kiosks are TZS 1,000/m³					
Effective date of the tariffs: 1st March 2019.						
Priority of Needs	1. Increase of water production to match water demand 2. Construction of wastewater collection and treatment facilities 3. Improvement of water service coverage. 4. Increase of operating income to correspond with expenditures 5. Improvement of revenue collections (reduction of high receivables).					
Customer Service	Average monthly consumption is about 14.5m³ per domestic connection with a per capita consumption of 28.4lts/capita/day. Water is available at an average of 17 hours a day. The quality of water meets the required standard in which the overall average compliance during the year was 100%. There were 2,807 consumer complaints recorded in which 2,807 complaints were resolved on time. The total number of complaints per 1000 connections is 255 Most of the complaints reported are related to billing which constituted about 34% of the total reported complaints.					
Performance Highlights	Kigoma WSSA provides water supply direct to 75% of the population in its service area. The reported NRW is at 28% .Operating and Working ratios are unsatisfactory at 1.1 and 1.3 respectively. Accounts receivable equivalent is extremely high at 10.8 months which is far away from the best practice of below 2 months. Average tariff at TZS 1,400 per m³ Staff/1000 connections ratio is fair at 6.					

## KIGOMA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	8,528m <sup>3</sup>
Production capacity/day	18,000m <sup>3</sup>
Treatment type	Chlorine dosing
Storage capacity	13,500m <sup>3</sup>
Length of Water network	295km

### Service Connections

Total water connections	11,002
Domestic water connections	10,314
Metering ratio	99%

### Service Indicators

Water service coverage	73%
Population directly served	62%
Service hours	15
Per capita consumption	26.6l/c/d
Average Tariff	849.40 TZS/m <sup>3</sup>
Complaints/1000 connection	63.6

### Efficiency Indicators

Non-Revenue Water	28%
Revenue collection efficiency	102% (including arrears)
Unit production cost	760 TZS/m <sup>3</sup>
Operating ratio	1.3
Working ratio	1.1
Account receivable	10.8
Staff/1000 total connections	6

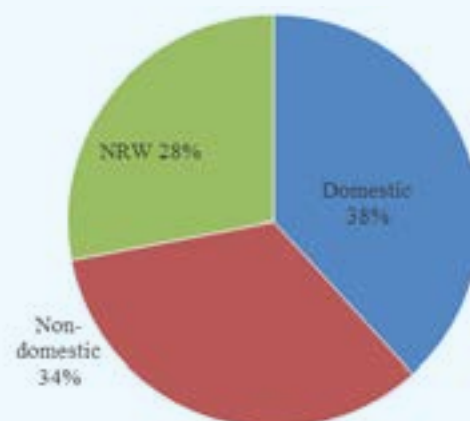
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 1,563,727,000.00
Government /Donor Grants	TZS 778,912,000.00
Amortized Grants	TZS 214,321,000.00
Other income	TZS 237,014,000.00
<b>TOTAL INCOME</b>	<b>TZS 2,793,974,000.00</b>

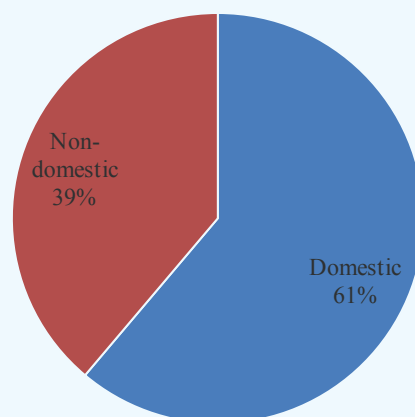
Water Production Expenses	TZS 800,788,000.00
Water distribution Expenses	TZS 775,199,000.00
Maintenance and Repair	TZS 119,456,000.00
Personnel Expenses	TZS 680,404,000.00
Administration Expenses	TZS 299,851,000.00
Other O&M Expenses	TZS 33,379,000.00
<b>Total O&amp;M</b>	<b>TZS 1,954,268,000.00</b>

Depreciation & Amortization	TZS 379,009,000.00
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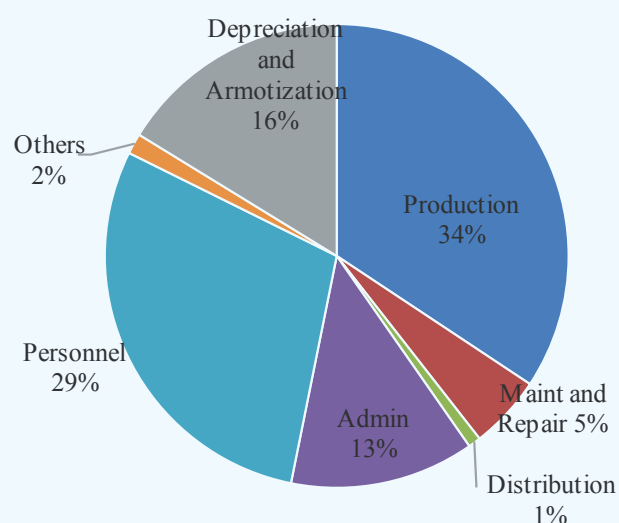
<b>ANNUAL EXPENDITURE</b>	<b>TZS 2,333,277,000.00</b>
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**ANNUAL WATER USE: 3,070,174 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 1,563,727,000.00**



**ANNUAL EXPENDITURE TZS 2,333,277,000.00**

**SINGIDA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/19/2011**

Water Utility	Singida WSSA is a fully autonomous public entity responsible for the overall operation and management of water supply and sanitation services in the Singida Municipality. Currently, Singida WSSA's service area has a total population of 111005 (projections from the 2012 Census Report) out of whom 88,804 are served by the utility. Water supply in Singida town is purely from underground sources. There are 23 boreholes in 9 well fields with water production capacity of 9,600m³ a day. Singida Municipal dwellers receive water supply services at an average of 16 hours per day. The current water demand in Singida WSSA's service area is estimated at 11,050m³/day. Singida WSSA has 21 storage tanks with a total storage capacity of 7,570m³. There are no sewerage services in Singida WSSA's service area, but plans are underway to implement the sewerage project. Singida WSSA has 45 staff.					
General Data About Water Utility	Total Water Connections	12,268				
	Active Water Connections	10,827				
	Total Sewerage Connections	0				
	Total Staff	45				
	Annual O&M Costs	TZS 4,436,953,305.08				
	Annual Water services Collections	TZS 2,289,145,050.75				
	Annual Water services billing	TZS 2,907,908,514.00				
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Industrial	Bulk customers
	<10	1,500	1,800	1,690	3,000	1,220
	>10	1,700	1,800	1,800	3,000	1,315
	Note:					
	Water Kiosk tariff is TZS 30 per 20litre container					
	Effective date of the tariffs: 1 <sup>st</sup> October 2018.					
Priority of Needs	1. Utilization of the available water production capacity to increase water production 2. Construction of waste water collection and disposal facilities 3. Improvement of water service coverage. 4. Increase of operating income to match expenditures 5. Improvement of revenue collections efficient					
Customer Service	Water is available at an average of 16 hours a day. The quality of water produced is good, the overall average compliance during the year was 100%. There were 1416 consumer complaints recorded in which all complaints were resolved on time. Good number of the complaints reported are related to lack of water/pressure, meter reading and water billing.					
Performance Highlights	Singida WSSA provides water supply direct to 80% of the population in its service area. The reported NRW is 28% .Operating and Working ratios are at 1.03 and 1.0 respectively. Accounts receivables equivalent is at 2.5 months.					

## SINGIDA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	7,058m <sup>3</sup>
Production capacity/day	9,600m <sup>3</sup>
Treatment type	Chlorination/Disinfection
Storage capacity	7,570m <sup>3</sup>
Length of distribution network	314km
Length of sewerage network -	

### Service Connections

Total water connections	12,268
Domestic waterage connections	11,233
Metering ratio	100%

### Service Indicators

Water service coverage	80%
Population directly served	78
Average service hours	16
Average tariff	1,715

### Efficiency Indicators

Non-revenue water	28%
Unit production costs	TZS 1,087/m <sup>3</sup>
Operating ratio	1.03
Working ratio	1.00
Accounts receivables	2.5 months
Staff/1000 connections	3.7

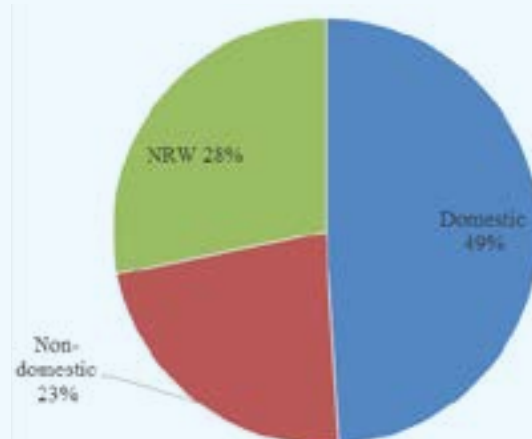
### Income and Expenditure

Annual operating income from water services	TZS 2,907,908,514.00
Government /Donor Grants	TZS -
Amortized Grants	TZS1,064,800,905.00
Other income	TZS 766,356,942.00
<b>TOTAL INCOME</b>	<b>TZS 4,739,066,361.00</b>

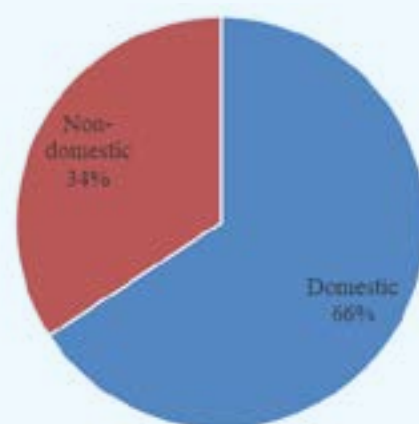
Water Production Expenses	TZS 781,331,347.00
Water distribution expenses	TZS 17,510,598.00
Maintenance and Repair	TZS 298,945,562.00
Personnel Expenses	TZS 2,109,861,572.00
Administration Expenses	TZS 1,229,304,226.00
Other O&M Expenses	TZS
<b>TOTAL O&amp;M EXPENSES</b>	<b>TZS 4,436,953,305.08</b>

Depreciation & Amortization	TZS 1,064,800,905.00
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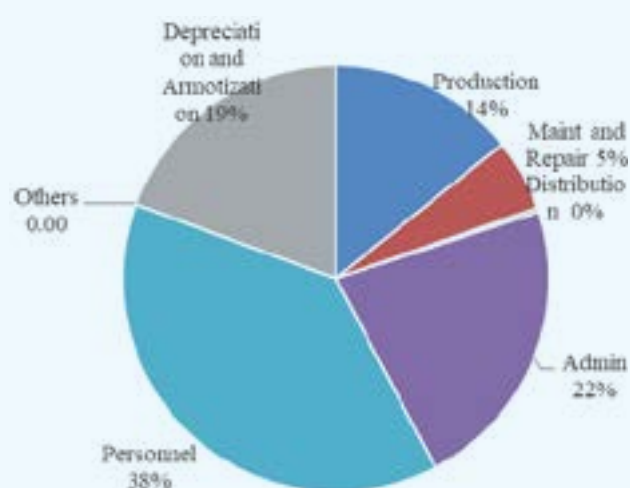
<b>ANNUAL EXPENDITURE</b>	<b>TZS 4,436,953,305.08</b>
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**ANNUAL WATER USE: 2,576,079 m<sup>3</sup>**



**ANNUAL WATER BILLING TZS 2,907,908,514.00**



**ANNUAL EXPENDITURE TZS 4,436,953,305.08**

**SUMBAWANGA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/07/2011**

Water Utility	Sumbawanga WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in the Sumbawanga Municipality. Sumbawanga WSSA is classified as a Class B water utility and its area of operation has a total population of 157,016. Currently the directly served population is 148,334 equivalent to 78% of total population in the service area also 78% of people are living in the area with water network. The utility draws water from surface (River – 62.8%) and groundwater sources (boreholes – 37.2%) and has three water treatment plants; one conventional is located at Majengo area and two semi conventional located at Kizitwe and Senga areas. The combined water sources production capacity is 20,493m3/day but the average water production is 6,980m³/day while water demand stands at 13,246m³/day. Total Length of Water Network is 300km. The utility has no sewerage network however has constructed the sludge treatment facilities.				
General Data About Water Utility	Total Water Connections	8871			
	Active Water Connections	7887			
	Total Sewerage Connections	-			
	Total Staff	50			
	Annual O&M Costs	TZS 2,977,366,319.00			
	Annual Water and Sewerage Collections	TZS 1,124,688,735.00			
	Annual Water and Sewerage Billings	TZS 1,164,686,807.56			
Tariff Structure	Water Tariff				
	Category	Domestic	Institutional	Commercial	Industrial
	Consumption	TZS/m³	TZS/m³	TZS/m³	TZS/m³
	0 - 5	800	1,000	1,000	1,155
	6 - 20	975	1,155	1,075	1,250
	>20	1,075	1,345	1,250	1,440
	Note:				
	Water Kiosk tariff is TZS 20 per 20 litre container				
Effective date of the tariffs: 1 <sup>st</sup> August 2017.					
Priority of Needs	1. Utilization of the available water production capacity to increase water production 2. Construction of waste water collection system 3. Improvement of water service coverage. 4. Increase of operating income to match expenditures 5. Improvement on customer metering				
Customer Service	Average monthly consumption is about 13.5m³ per domestic connection with a per capita consumption of 23.3lts/capita/day. Water is available at an average of 20 hours a day. The quality of water produced is good, the overall average compliance during the year was 98.6%. There were 423 consumer complaints recorded in which all complaints were resolved on time. The total number of complaints per 1000 connections is 47.7				
Performance Highlights	Sumbawanga WSSA provides water supply direct to 78% of the population in its service area. The reported NRW has deteriorated from 30.97% reported in FY 2016/17 to 43% in FY 2018/19. All productions points are metered with 88.9% customers being metered. Operating and Working ratios are at 1.32 and 1 respectively. Accounts receivables equivalent is at 4.7 months which is above the best practice of below 2 months. Average tariff of TZS 928 per m³ is sufficient to cover all operating expenses. Staff/1000 connections ratio is at 6.2.				

## SUMBAWANGA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	6,980m <sup>3</sup>
Production capacity/day	20,500m <sup>3</sup>
Treatment type	Partial Convention
Storage capacity	8,350m <sup>3</sup>
Length of Water network	300km

### Service Connections

Total water connections	8871
Domestic water connections	8238
Metering ratio	88.9%

### Service Indicators

Water service coverage	78%
Population directly served	148334
Service hours	20
Per capita consumption	23.3 lts/day
Average Tariff	925 TZS/m <sup>3</sup>
Complaints/1000 connection	47.7

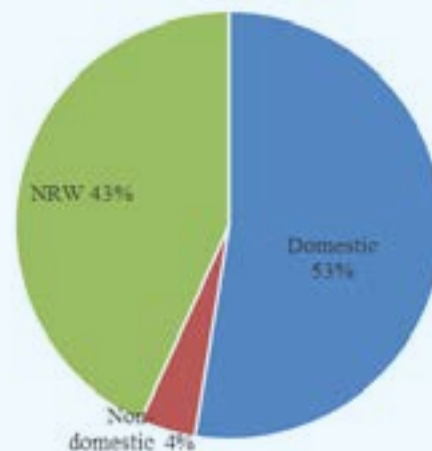
### Efficiency Indicators

Non-Revenue Water	43%
Revenue collection efficiency	97%
Unit production cost	797.3 TZS/m <sup>3</sup>
Operating ratio	1.32
Working ratio	1
Accounts receivables	4.7
Staff/1000 total connections	6.2

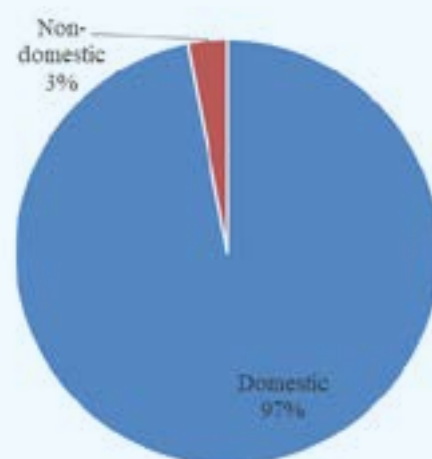
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 1,164,686,807.56
Government /Donor Grants	TZS -
Amortized Grants	TZS 419,892,924.65
Other income	TZS 395,519,192.00
<b>TOTAL INCOME</b>	<b>TZS 1,980,098,924.21</b>

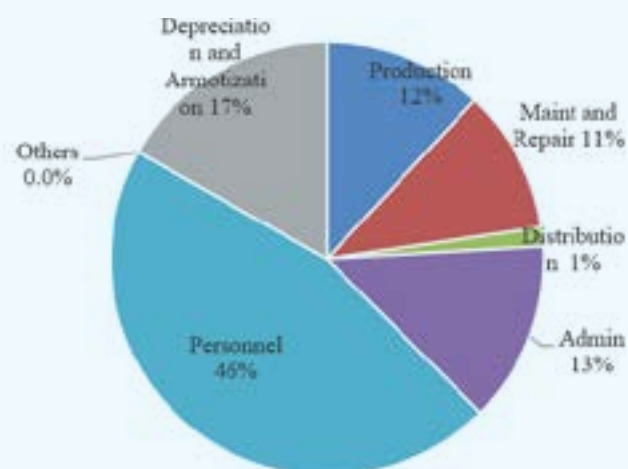
Water Production Expenses	TZS 355,568,957.00
Water distribution Expenses	TZS 42,577,345.00
Maintenance and Repair	TZS 319,003,621.00
Personnel Expenses	TZS 1,360,766,017.00
Administration Expenses	TZS 399,340,934.00
Other O&M Expenses	TZS
<b>Total O&amp;M</b>	<b>TZS 2,477,256,874.24</b>
Depreciation & Amortization	TZS 500,109,445.00
<b>ANNUAL EXPENDITURE</b>	<b>TZS 2,977,366,319.00</b>



**ANNUAL WATER USE: 2,547,660m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 1,164,686,807.56**



**ANNUAL EXPENDITURE TZS 2,977,366,319.00**

**BABATI WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/14/11**

Water Utility	Babati WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Babati town. Babati WSSA is classified as class C water utility and its area of responsibility has a total population of 116,077 people out of whom 91,190 are served with the utility. The operational area of the utility has a population density of 245 persons/km². The utility draws water from one spring source (Mrara Spring) and fourteen boreholes. The combined water sources production capacity is 15,384m³/day while water demand stands at 8,125 m³/day. The total length of the water network is 305.4km and water is available at an average of 19 hours per day. The Utility has no sewerage system. Babati WSSA has 28 staff.					
General Data About Water Utility	Total Water Connections	8859				
	Active Water Connections	8178				
	Total Sewerage Connections	0				
	Total Staff	28				
	Annual O&M Costs	TZS 4,709,814,782.00				
	Annual Water and Sewerage Collections	TZS 1,736,192,223.00				
	Annual Water and Sewerage Billings	TZS 1,995,886,745.00				
Tariff Structure	Water Tariff					
	Categories	Domestic	Institutional	Commercial	Industrial	Kiosk
	Band 1 (0-5m3)	1,520	2,250	2,350	2,400	845
	Band 2 (6-10m3)	1,600				
	Band 3 (>10 m3)	1,670				
	Effective date of the tariffs: 1 <sup>st</sup> May 2019.					
Priority of Needs	1. Improve water storage capacity by constructing additional water storage tanks 2. Acquisition of land and construction of wastewater and fecal sludge treatment facility 3. Reduction of high Non-Revenue Water					
Customer Service	Average monthly consumption is about 10.7m³ per domestic connection with a per capita consumption of 25lts/capita/day. Water is available at an average of 19 hours a day. The overall water quality compliance during the year was 91.6%. There were 2474 consumer complaints recorded in which all complaints were resolved on time. The total number of complaints per 1000 connections is 279.					
Performance Highlights	Babati WSSA provides water supply direct to 79% of the population in its service area. The reported NRW is still high at 39% in 2018/19which is above the service level benchmark. All production points are metered as well as all customer connections. Operating ratio is unsatisfactory at 1.44 while working ratio is at 1.02. Accounts receivables equivalent is at 1.09 months which is fair compared to best practice of below 2 months. Average tariff at TZS 1,748 per m³ is fair although not sufficient to cover all operating expenses. Staff/1000 connections ratio is good at 3.4.					

## BABATI WSSA PROFILE

2018/19

Production/Distribution	
Average daily production	6159m <sup>3</sup>
Production capacity/day	15384m <sup>3</sup>
Treatment type	Chlorine Dosing
Storage capacity	1421m <sup>3</sup>
Length of Water network	305.4km

### Service Connections

Total water connections	8859
Domestic water connections	8259
Metering ratio	100

### Service Indicators

Water service coverage	81%
Population directly served	79%
Service hours	19
Per capita consumption	25.1lts/day
Average Tariff	35 TZS/m <sup>3</sup>
Complaints/1000 connection	279.3

### Efficiency Indicators

Non-Revenue Water	44%
Revenue collection efficiency	95.2%
Unit production cost	1,388.70 TZS/m <sup>3</sup>
Operating ratio	33
Working ratio	34
Accounts receivables	5
Staff/1000 total connections	3.4

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 1,709,004,086.00
Government /Donor Grants	TZS -
Amortized Grants	TZS 1,220,566,436.00
Other income	TZS 3,771,552,336.00

### TOTAL INCOME

**TZS 3,792,277,695.00**

Water Production Expenses	TZS 47,4645,980.00
Water distribution Expenses	TZS 424,563,166.00
Maintenance and Repair	TZS 65,391,420.00
Personnel Expenses	TZS 570,290,129.00
Administration Expenses	TZS 432,587,631.00
Other O&M Expenses	TZS 570,290,129.00

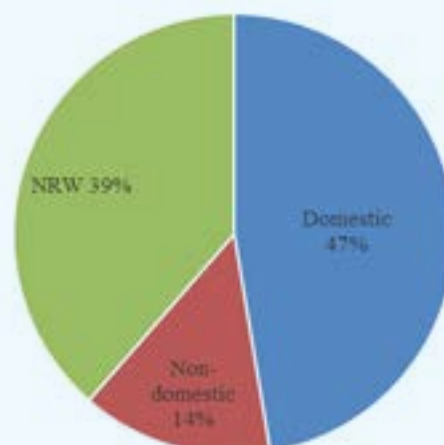
### Total O&M

**TZS 3,566,347,902.00**

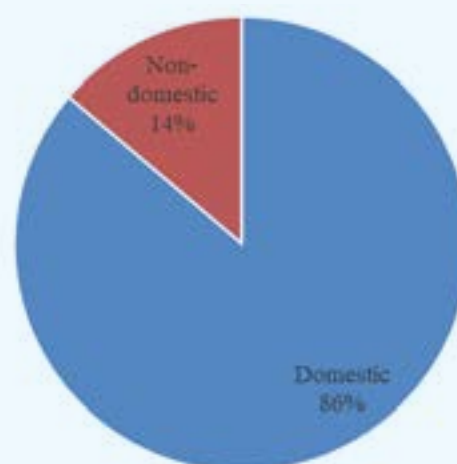
Depreciation & Amortization	TZS 1,003,515,016.00
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### ANNUAL EXPENDITURE

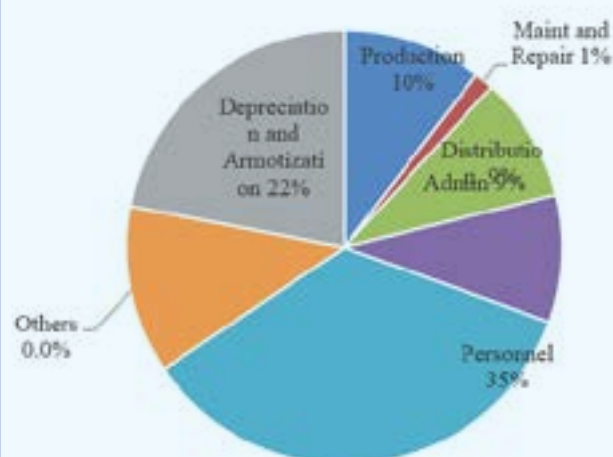
TZS 4,569,862,918.00



**ANNUAL WATER USE: 2,248,165m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 1,995,886,745.00**



**ANNUAL EXPENDITURE TZS 4,569,862,918.00**

**LINDI WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/03/2011**

Water Utility	Lindi WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Lindi Municipality. The total new municipal area is approximately 830km². Its area of operation has a total population of 91,968 out of whom 63,394 people are currently served (76% people are living in the area with water network). The utility draws water from thirteen (13) isolated water sources which are boreholes, springs and stream with total installed capacity is of 10,500 m³/day. Among all 13 water sources, the main water source is a newly constructed Ng’apa well field, with eight boreholes of total capacity of 7,500m³/day. Water produced is treated at a newly constructed Ng’apa treatment plant, and the length of pipe network is 176km, with a total storage capacity of 8610m³. The available water production capacity is sufficient compared to estimated demand, however during the FY 2018/19 water produced was 2431m³ per day which was insufficient as compared to water demand; the daily water demand was 4,810m³. Water is supplied at an average of 12hours per day. The utility has neither a sewerage system nor a sewage treatment plant, but there is a sludge digester						
General Data About Water Utility	Total Water Connections						4,059
	Active Water Connections						3,623
	Total Sewerage Connections						0
	Total Staff						37
	Annual O&M Costs						TZS 642,027,554.44
	Annual Water and Sewerage Collections						TZS 348,089,029.00
	Annual Water and Sewerage Billings						TZS 442,466,283.00
	Water Tariff						
	WATER TARIFF						
	Category	Domestic	Institutional	Commercial	Industrial	Kiosks	Bowser
	TZS./m³	1,400-1,500	1,900	2,000	2,000	1,500	3,600
	Flat rate (TZS.)	DISALLOWED Lindi WSSA shall meter all its customers					
	Effective date of the tariffs: 1 <sup>st</sup> February 2019.						
Priority of Needs	1. Utilization of the available water production capacity to increase water production 2. Reduction of high NRW 3. Improvement of water service coverage. 4. Increase of operating income to match expenditures 5. Improvement of revenue collections (reduction of high receivables).						
Customer Service	Average monthly consumption is about 6.77m³ per domestic connection with a per capita consumption of 8.4lts/capita/day. Water is available at an average of 12 hours a day. The quality of water produced is fairly good, the overall average compliance during the year was 95%. There were 509 consumer complaints recorded in which all complaints were resolved on time. The total number of complaints per 1000 connections is 208. Most of the complaints reported are related to lack of water/pressure and billing which constitute about 65% of the total reported complaints.						
Performance Highlights	Lindi WSSA provides water supply direct to 63394 people in its service area. The reported NRW is improving to 33. Water production is estimated as the water production points are not metered. Operating and Working ratios are unsatisfactory at 1.42 and 1.01 respectively. Accounts receivables equivalent is extremely high at 5.8 months which is far away from the best practice of below 2 months. Average tariff at TZS 1,700 per m³ is not sufficient to cover all operating expenses and part of investment, which is averaging at TZS 2,250 per m³. Staff/1000 connections ratio is high at 11.8						

## LINDI WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	2431
Production capacity/day	10,500m <sup>3</sup>
Treatment type	Conventional
Storage capacity	8,610m <sup>3</sup>
Length of Water network	176km

### Service Connections

Total water connections	4059
Domestic water connections	3523
Metered water connection	100%

### Service Indicators

Population directly served	63394
Service hours	11.63
Per capita consumption	8.381528405 Lts/day
Average Tariff	1,117 TZS/m <sup>3</sup>
Complaints/1000 connection	208.4

### Efficiency Indicators

Non-Revenue Water	34%
Revenue collection efficiency	101.9817478
Unit production cost	2,250 TZS/m <sup>3</sup>
Operating ratio	1.83
Working ratio	1.12
Accounts receivables	9.8
Staff/1000 total connections	11.8

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 1,266,764,252.00
Government /Donor Grants	TZS -
Amortized Grants	TZS 345,882,339.00
Other income	TZS 12,667,642,521.00

### TOTAL INCOME

**TZS 920,881,913**

Water Production Expenses	TZS 220,022,790.00
Water distribution Expenses	TZS 174,922,388.00
Maintenance and Repair	TZS 6,948,196.00
Personnel Expenses	TZS 126,612,439.00
Administration Expenses	TZS 109,388,938.00
Other O&M Expenses	TZS 5,199,803.00

### Total O&M

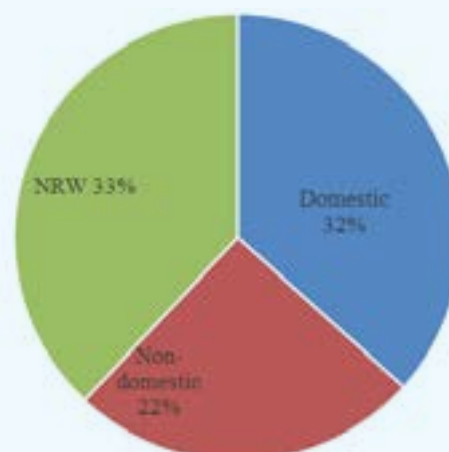
**TZS 643,094,554.00**

Depreciation & Amortization

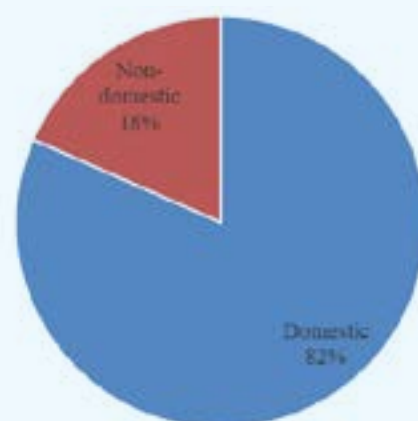
TZS 408,807,256.00

### ANNUAL EXPENDITURE

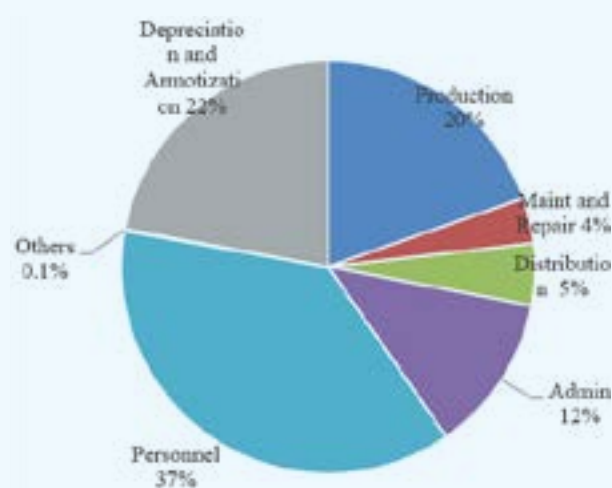
**TZS 1,051,901,810.00**



**ANNUAL WATER USE: 887,435m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 736,970,253.00**



**ANNUAL EXPENDITURE TZS 2,146,010,086.00**

**BARIADI WSSA PROFILE**
**2018/19**
**EWURA LICENSE NO: WSSSL/61/12**

Water Utility	Bariadi Water Supply and Sanitation Authority (Bariadi WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services in Bariadi Town. Its area of operation has a total population of 65016people while the served population is 14304. The utility draws water from nine boreholes located at Majahida (2), Mahaha (2), Somanda (2), Kidinda (1), Isanzu (1) and Sanungu (1). Currently, 6 boreholes are functioning while the remaining 3 are not working due failure of submersible pumps. Water services are available at an average of 12 hours per day. The Utility does not have sewerage system and sewage treatment plant. Sanitation services are operated under the supervision of Bariadi District Council. Baradi WSSA has water quality monitoring program, of which it employs water quality laboratory services from Shinyanga regional water quality laboratory to audit the quality of water it produces. Bariadi WSSA has 14 total staff.				
General Data About Water Utility	Total Water Connections	1,141			
	Active Water Connections	1,120			
	Total Sewerage Connections	-			
	Total Staff	14			
	Annual O&M Costs	TZS 485,928,494.00			
	Annual Water and Sewerage Collections	TZS 122319493.00			
	Annual Water and Sewerage Billings	TZS 142,508,674.20			
Tariff Structure	Water Tariff				
	Category of customer	Domestic	Institutions	Commercial	Kiosk
	Consumption charge (TZS/m³)	660	780	900	30/- per 20lts bucket
	Flat rate charge (TZS/Month)	6,800	15,300	19,300	-
	Effective date of the tariffs: 1 <sup>st</sup> June 2011.				
Priority of Needs	1. Increase water production to match with water demand 2. Construction of wastewater collection and treatment facilities 3. Improvement of water service coverage. 4. Increase of operating income to correspond with expenditures 5. Improvement of revenue collections (High receivables).				
Customer Service	Average monthly consumption is about 8.35m³ per domestic connection with a per capita consumption of 4lts/capita/day. Water is available at an average of 12 hours a day. The quality of water meets the required standard in which the overall average compliance during the year was 100%. There were 224 consumer complaints recorded in which all complaints were resolved on time. The total number of complaints per 1000 connections is 12.3. Most of the complaints reported are related to water leakages, meter readings and billing which constitute about 73% of the total reported complaints.				
Performance Highlights	Bariadi WSSA provides water supply direct to 14304 people in its service area. The reported NRW is improving to 23. All productions points are metered as well as all customer connections. Operating and Working ratios are unsatisfactory at 1.79 and 1.41respectively. Accounts receivable equivalent is extremely high at 3.8 months which is far away from the best practice of below 2 months. Average tariff at TZS 730 per m³ with ineffectively high staff/1000 connections ratio of 12.				

## BARIADI WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	558m <sup>3</sup>
Production capacity/day	0m <sup>3</sup>
Treatment type	Chlorine Dosing
Storage capacity	1,190m <sup>3</sup>
Length of Water network	42km

### Service Connections

Total water connections	1141
Domestic water connections	976
Metered water connection	80%

### Service Indicators

Population directly served	22
Service hours	12
Per capita consumption	4l/c/d
Average Tariff	730 TZS/m <sup>3</sup>
Complaints/1000 connection	400

### Efficiency Indicator

Non-Revenue Water	23
Revenue collection efficiency	0% (including arrears)
Unit production cost	1,999.9 TZS/m <sup>3</sup>
Operating ratio	1.79
Working ratio	1.41
Accounts receivables	3.79
Staff/1000 total connections	12.3

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 142,508,674.20
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 127325569.8

### TOTAL INCOME

**TZS 2283776205.17**

Water Production Expenses	TZS 88,520,200.00
Water distribution Expenses	TZS 39,433,200.00
Maintenance and Repair	TZS 14,943,000.00
Personnel Expenses	TZS 233,738,494.00
Administration Expenses	TZS 109,293,600.00
Other O&M Expenses	TZS -

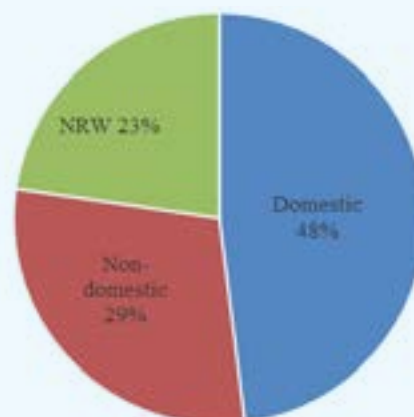
### Total O&M

**TZS 485,928,494.00**

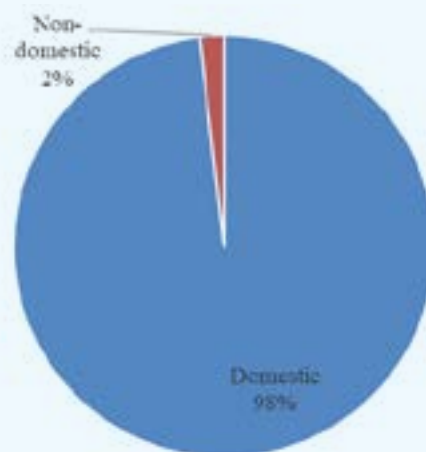
Depreciation & Amortization	TZS 87,039,972.00
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### ANNUAL EXPENDITURE

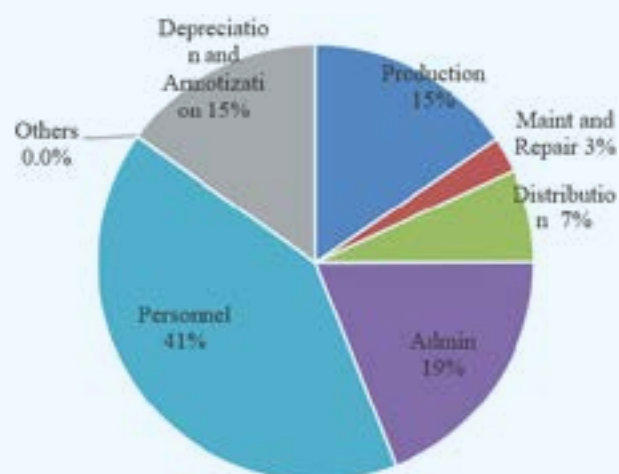
**TZS 572,968,466.00**



**ANNUAL WATER USE: 203,681m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 142,508,674.20**



**ANNUAL EXPENDITURE TZS 572,968,466.00**

**GEITA WSSA PROFILE**
**2018/19**
**EWURA LICENSE NO: WSSSL/81/2012**

Water Utility	Geita Water Supply and Sanitation Authority (Geita WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services in the Geita Town. Its area of operation has a total population of 235,315 people while the served population is 130,365 people (About 59 people are living in the area with water network). The utility draws water from Kagera Spring, Nyakanga dam which contributes 82.2% of the supply and four deep boreholes namely Kambarage, Bomani and Tambukareli which contribute 24.8%. Kagera water spring contributes 3% of the total production. Water services are available at an average of 12 hours per day. The Utility does not have sewerage system and sewage treatment plant. The utility has faecal sludge wastewater sludge and a cesspit emptier truck. Sanitation services are operated in collaboration with Geita District Council. GeitaWSSA has water quality monitoring program, of which it employs water quality laboratory services from Mwanza regional water quality laboratory to audit the quality of water. Geita WSSA has a total work force of 23, and currently it has submitted to EWURA a draft Client Service Charter for review.				
General Data About Water Utility	Total Water Connections	5,961			
	Active Water Connections	4,572			
	Total Sewerage Connections	-			
	Total Staff	23			
	Annual O&M Costs	TZS 2,346,900,614.15			
	Annual Water and Sewerage Collections	TZS 0.00			
	Annual Water and Sewerage Billings	TZS 1,030,515,270.76			
Tariff Structure	Metered Water Tariff				
	Category	Domestic	Institutional	Commercial	Industrial
		TZS/m³	TZS/m³	TZS/m³	TZS/m³
	Consumption Charge	920 – 1,350	1,550	1,750	1,950
	<b>Note:</b> The charges at water kiosks are TZS 26 per 20litre bucket <b>Effective date of the tariffs: 15<sup>th</sup> March 2019.</b>				
Priority of Needs	1. Increase of water production to match with water demand 2. Reduction of NRW to acceptable level 3. Improvement of water service coverage. 4. Improvement of revenue collection efficiency				
Customer Service	Average monthly consumption is about 9.8m³ per domestic connection with a per capita consumption of 7.6lts/capita/day. Water is available at an average of 12 hours a day. Generally, the quality of water meets the required standard although the compliance level with respect to Residual Chlorine was low at 45%. There were 657 consumer complaints recorded in which 657 complaints were resolved on time. The total number of complaints per 1000 connections is 110.2. Most of the complaints reported are related to lack of water/pressure which constituted about 56% of the total reported complaints.				
Performance Highlights	Geita WSSA provides water supply direct to 130365 people in its service area. The NRW has increased from 25% reported in FY 2016/17 to 32% in FY 2018/19. Neither all production points nor all customer connections are metered. Operating and Working ratios are 2.33 and 1.59 respectively. Accounts receivables equivalent is 1 months which is slightly away from the best practice of below 2 months. Average tariff at TZS 1,305/m³ is sufficient to cover all operating expenses and part of investment which is averaging at TZS 630.90 per m³. Staff/1000 connections ratio is fair at 4.				

## GEITA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	4338m <sup>3</sup>
Production capacity/day	5774m <sup>3</sup>
Treatment type	Conventional
Storage capacity	1,560m <sup>3</sup>
Length of Water network	239.2km

### Service Connections

Total water connections	5961
Domestic water connections	5577
Metered water connection	91.6%

### Service Indicators

Population directly served	130,365
Service hours	12
Per capita consumption	7.6l/c/d
Average Tariff	1305 TZS/m <sup>3</sup>
Complaints/1000 connection	110.2

### Efficiency Indicators

Non-Revenue Water	32
Unit production cost	1526.5 TZS/m <sup>3</sup>
Operating ratio	2.33
Working ratio	1.59
Accounts receivables	1
Staff/1000 total connection	4

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 1,030,515,270.76
Government /Donor Grants	TZS 1,476,237,828.00
Amortized Grants	
Other income	TZS 14760600.00

### TOTAL INCOME

**TZS 2,283,776,205.00**

Water Production Expenses	TZS 37,725,682.00
Water distribution Expenses	TZS 71,000.00
Maintenance and Repair	TZS 43,918,427.00
Personnel Expenses	TZS 165,913,130.00
Administration Expenses	TZS 159,047,428.00
Other O&M Expenses	TZS 14,264,328.00

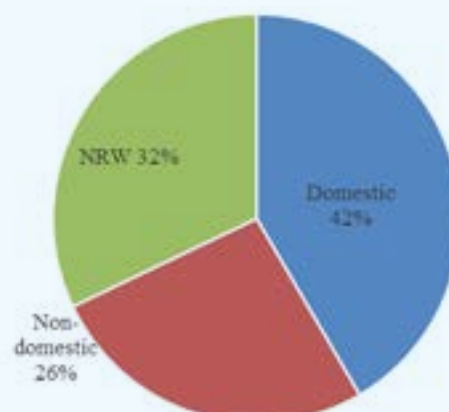
### Total O&M

**TZS 420,929,995.00**

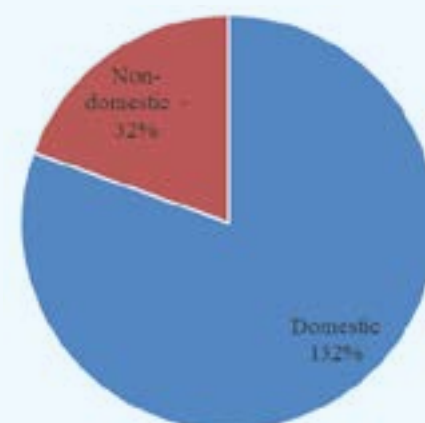
Depreciation & Amortization	TZS 763,067,721.00
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### ANNUAL EXPENDITURE

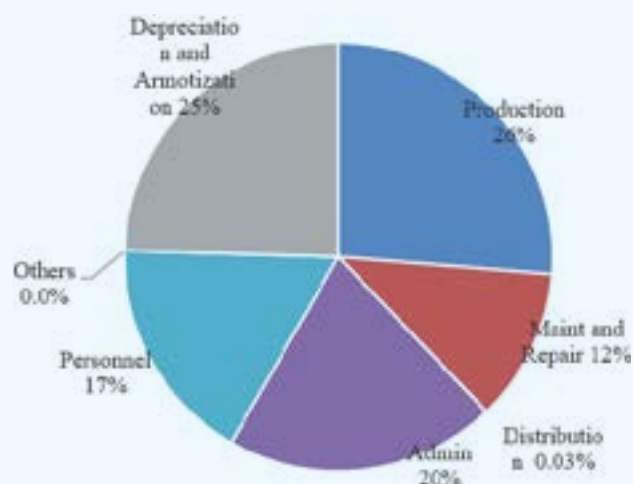
**TZS 3109,968,335.00**



**ANNUAL WATER USE: 15833604m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 1,030,515,270.76**



**ANNUAL EXPENDITURE TZS 3,109,968,335.00**

**MPANDA WSSA PROFILE**
**2018/19**
**EWURA LICENSE NO: WSSSL/51/2012**

<b>Water Utility</b>	Mpanda WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply services in the Mpanda township. Its area of operation has a total population of 143,112. Current directly served population is 69,982, equivalent to 49% of total population in service area. Proportion of Population living in the area with water network is 74%. The Utility draws water from Spring sources contributing 94% of the total abstraction, from dam 3% and from groundwater 3% of the total abstraction. Total length of water network is 179km. The utility has no sewerage system.																						
<b>General Data About Water Utility</b>	Total Water Connections	5,176																					
	Active Water Connections	4,162																					
	Total Wastewater Connections	-																					
	Total Staff	30																					
	Annual O & M Costs	TZS 1,127,116,000																					
	Annual Water and Sewerage Collections	TZS 511,655,060																					
	Annual Water and Sewerage Billing	TZS 775,092,000																					
<b>Tariff Structure</b>	<b>Water Tariff</b> <table border="1"> <thead> <tr> <th>Category of customer</th><th>Domestic</th><th>Institutions</th><th>Commercial</th><th>Industrial</th><th>Kiosk</th></tr> </thead> <tbody> <tr> <td>Metered (TZS/M<sup>3</sup>)</td><td>800</td><td>820</td><td>850</td><td>950</td><td>1,000</td></tr> <tr> <td>Flat rate (TZS/Month)</td><td>13,000</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table> <b>Effective date of tariff: 1<sup>st</sup> February, 2016</b>					Category of customer	Domestic	Institutions	Commercial	Industrial	Kiosk	Metered (TZS/M <sup>3</sup> )	800	820	850	950	1,000	Flat rate (TZS/Month)	13,000	-	-	-	-
Category of customer	Domestic	Institutions	Commercial	Industrial	Kiosk																		
Metered (TZS/M <sup>3</sup> )	800	820	850	950	1,000																		
Flat rate (TZS/Month)	13,000	-	-	-	-																		
<b>Priority of Needs</b>	1. Reduction of NRW by implementing strategies laid in NRW Strategy 2. Strengthening human resources capacity and working environment. 3. Improve the accessibility of water service by extending water supply network to unserved areas. 4. Conservation of water sources. 5. Provision of sanitation services																						
<b>Customer Service</b>	Average monthly consumption is about 10m <sup>3</sup> per connection, with per capita consumption of 14 lts/day. Water is available at an average of 6 hours per day. Water quality compliance to WHO set standards is average with both E-Coli having 100% and Turbidity having 100% compliance There were 6.6 pipe breaks per km per year recorded during the year. There were 769 customer complaints reported. The total number of complaints per 1000 connections is 149 and 17% of the total complaints are bill related.																						
<b>Performance Highlights</b>	Mpanda WSSA provides direct water supply to 49% of the population living in the area with water network. NRW currently stands at 27%. A large portion of customers is metered and, currently, metering ratio is 86%. Operating ratio is 3.0 and Accounts receivable equivalent is 0.8 months. Average tariff stands at TZS 976 per m <sup>3</sup> that is inadequate for covering operating expenses and network extensions. Ratio of Staff per 1000 water connections ratio is 6.																						

## MPANDA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	2,720 m <sup>3</sup> /day
Production capacity/day	7,850 m <sup>3</sup> /day
Treatment type	Chlorination
Storage capacity	2,350 m <sup>3</sup>
Length of Water network	178.62 km

### Service Connections

Total water connections	5,176
Domestic water connections	4,865
Total sewer connections	-
Domestic sewer connections	-
Metered water connections	4,451

### Service Indicators

Water Service Coverage	75.0%
Population directly served	49%
Service hours	6 hours
Per capita consumption	14 l/c/d
Average Tariff	976 TZS/m <sup>3</sup>
Complaints/1000 connection	149

### Efficiency Indicators

Non-Revenue Water	27.00 %
Revenue collection efficiency	90%
Unit production cost	1,972 TZS/m <sup>3</sup>
Operating ratio	3.0
Working ratio	2.7
Accounts receivables	0.8 months
Staff/1000 total connections	6
Water Quality Compliance	100%

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 746,840,000.00
Government /Donor Grants	TZS 0
Amortized Grants	TZS 0
Other income	TZS 1,317,865,000.00

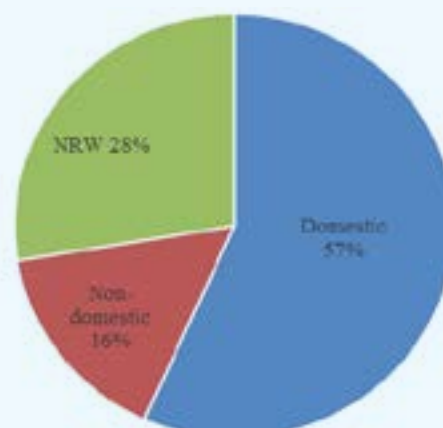
### TOTAL INCOME

**TZS 2,064,705,000.00**

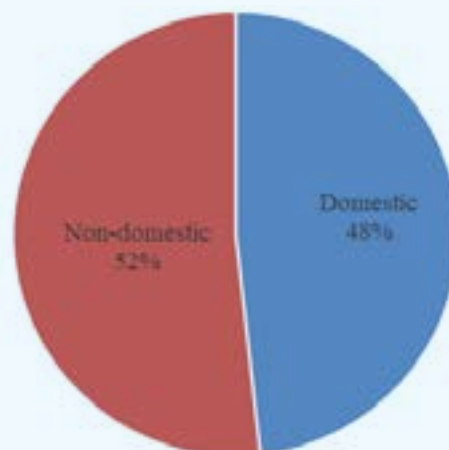
Water Production Expenses	TZS 161,674,000.00
Water distribution Expenses	TZS 532,000.00
Maintenance and Repair	TZS 40,002,000.00
Personnel Expenses	TZS 746,258,000.00
Administration Expenses	TZS 178,650,000.00
Other O & M Expenses	TZS 0.00
Total O & M	TZS 1,127,116,000.00
Depreciation and Amortization	TZS 0.00

### ANNUAL EXPENDITURE

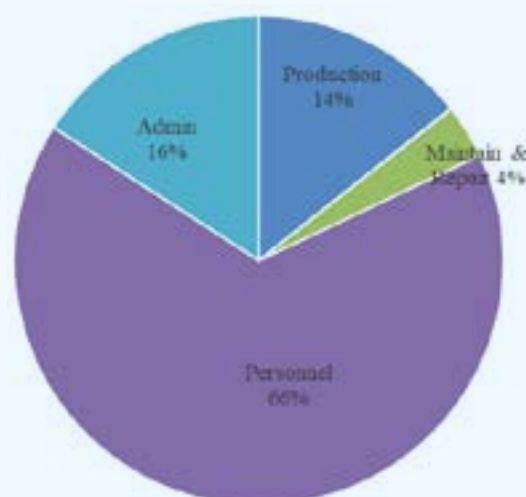
**TZS 1,127,116,000.00**



**ANNUAL WATER USE 718,790 m<sup>3</sup>**



**ANNUAL WATER BILLING TZS 775,092,000.00**



**ANNUAL O & M COSTS TZS 2,064,705,000.00**

**NJOMBE WSSA PROFILE**
**2018/19**
**EWURA LICENSE NO:WSSSL/46/2012**

Water Utility	Njombe WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply services in the Njombe Township. The area of operation with infrastructure under monitoring of Njombe WSSA has a total population of 68,568. The population living in the area with water network is 88%. Njombe WSSA provides direct water supply to 64% of the population in its service area. The Utility draws water from surface (Springs - 100%). Total Length of Water Network is 145km. The Utility has no sewerage system.				
General Data About Water Utility	Total Water Connections	7,255			
	Active Water Connections	6,216			
	Total Wastewater Connections	-			
	Total Staff	37			
	Annual O & M Costs	TZS 1,418,760,173.00			
	Annual Water and Sewerage Collections	TZS 879,363,453.00			
	Annual Water and Sewerage Billing	TZS 883,679,090.00			
	Water Tariff				
	Category of customer	Domestic	Institutions	Commercial	Industrial
	Metered (TZS/m³ )	855 - 950	980 - 1100	980 – 1000	980 - 1000
	Flat rate (TZS/month)	11,650	-	-	
	Note: Kiosk sale: TZS 20 per 20 litre jerry Effective date of tariff: 1 <sup>st</sup> November, 2015				
Priority needs	1. Improvement and expansion in water sources and production 2. Expansion of distribution infrastructure to cover fast growing areas. 3. Improve metering of customers and reduction of NRW 4. Strengthening capacity of staff to be able to efficiently and effectively manage its operations 5. Provision of sanitation services				
Consumer Service	Average monthly consumption is about 9m³ per connection, with per capita consumption of 36lts/day. Water is available at an average of 16 hours per day. Water quality compliance with WHO set standards are good with E-coli at 80% and turbidity at 84% compliance. There were 1.5 pipe breaks per km per year recorded. There were 1,331 customer complaints reported. The total number of complaints per 1000 connections is 129 and 10% of the total complaints are bill related.				
Performance Highlights	Njombe WSSA provides direct water supply to 64% people in its service area. The population living in area with water network is 88%. NRW stands at 29.3%. A bigger portion of customers is metered and currently metering ratio is 86%. Operating ratio is 1.0 and accounts receivable equivalent is 1.6 months. Average tariff stands at TZS 1003.13 per m³. The ratio of staff per 1000 total connections ratio 4.				

## NJOMBE WSSA PROFILE

### Production/Distribution

Average daily production	3,475 m <sup>3</sup> /day
Production capacity/day	5,607 m <sup>3</sup> /day
Treatment type	Chlorination
Storage capacity	1,045 m <sup>3</sup>
Length of Water network	145.075 km

### Service Connections

Total water connections	7,255
Domestic water connections	7,027
Metered water connections	6,239

### Service Indicators

Water Service Coverage	87.5 %
Population directly served	64 %
Service hours	16 hours
Per capita consumption	36 l/c/d
Average Tariff	1003.13 TZS/m <sup>3</sup>
Complaints/1000 connection	183

### Efficiency Indicators

Non-Revenue Water	29.30 %
Revenue collection efficiency	0%
Unit production cost	848 TZS/m <sup>3</sup>
Operating ratio	1.0
Working ratio	0.9
Accounts receivables	1.6 months
Staff/1000 total connections 4	
Water Quality Compliance	86 %

### Income and Expenditure

Annual operating income from water and sewerage services	TZS 883,679,090.0
Government /Donor Grants	TZS 0
Amortized Grants	TZS 179,700,660.0
Other income	TZS 74,081,895

### TOTAL INCOME

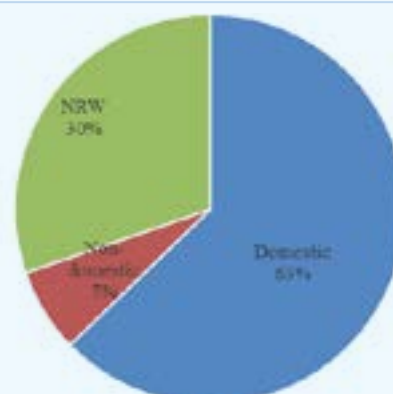
**TZS 1,137,461,645**

Water Production Expenses	TZS 9,415,384
Water distribution Expenses	TZS 55,889,187
Maintenance and Repair	TZS 61,790,310
Personnel Expenses	TZS 906,447,970
Administration Expenses	TZS 385,217,322
Other O & M Expenses	TZS 0
Total O & M	TZS 1,418,760,173
Depreciation and Amortization	TZS 179,700,660

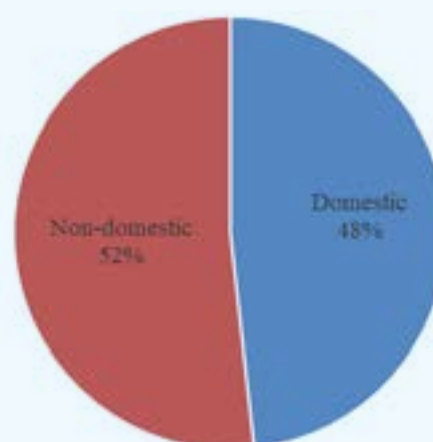
### ANNUAL EXPENDITURE

**TZS 1,598,460,833**

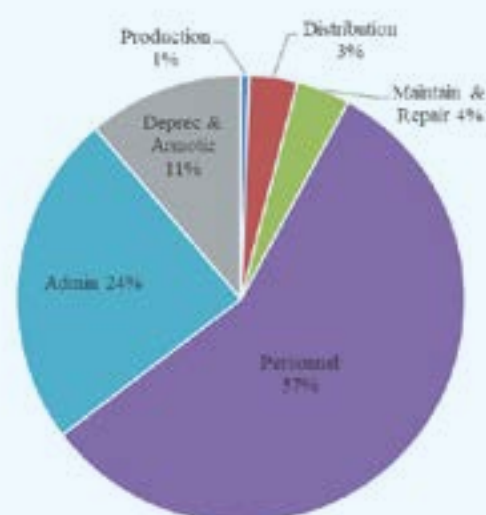
2018/19



**ANNUAL WATER USE 884,219 m<sup>3</sup>**



**ANNUAL WATER BILLING TZS 883,679,090**



**ANNUAL O&M COSTS TZS 1,137,461,645.00**

**VWAWA-MLOWO WSSA PROFILE**  
**EWURA LICENSE NO:WSSSL/03/2018**
**2018/19**

Water Utility	Vwawa-Mlowo WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in Vwawa and Mlowo Township. Vwawa-Mlowo WSSA is classified as Category C water utility and its area of responsibility has a total population of 113,785 as projected from the 2012 census of which 43,126 people are served with water by the utility. The utility draws water from Mgombezi stream with capacity of 2,211m3/day, Panahalanga/Haloli stream with capacity of 525m3/day, Mantengu River with capacity 864m3/day, Mbozi Club spring with capacity of 294m3/day, Maji Yard borehole with capacity of 192m3/day, Mlowo river with capacity of 1,400m3/day and Lutumbi springs with capacity of 52.03m3/day. The combined production capacity is 5,538m3/day while water demand is 9,558m3/day. The utility has neither sewerage system nor sewage treatment plant. Vwawa-Mlowo WSSA has 13 staff.	
General Data About Water Utility	Total Water Connections	1,814
	Active Water Connections	536
	Total Wastewater Connections	-
	Total Staff	13
	Annual O & M Costs	TZS 163,592,280
	Annual Water and Sewerage Collections	TZS 74,208,370
	Annual Water and Sewerage Billing	TZS 97,459,651
Tariff Structure	<b>Water Tariff</b> Note: Vwawa-Mlowo is a new water utility, during the period under review had no tariff approved by EWURA.	
Priority of Needs	1. Extension of water supply newtwork 2. Improvement of water treatment plants. 3. Construction of sewerage network and sewage treatment plant 4. Extension of water supply network. 5. Rehabilitation of water supply network.	
Customer Service	Average monthly water consumption is about 14m3 per domestic connection with per capita consumption of 16 lts/day. Water is available at an average of 6.8 hours a day and water quality compliance is 65%. During the year under review, there were 724 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 399 of which 11% were related to billing.	
Performance Highlights	Vwawa-Mlowo WSSA provides water supply direct to 38% of the population in its service area. NRW is not within the recommended values and is at 34.7%. Water production is ascertained by both bulk meter and estimates. Metering ratio is low at 30%. Operating and working ratios are 1.72 and 0.88 respectively. Average tariff is TZS 395 per m3 that covers only part of the operating expenses. Staff/1000 total connections ratio is high at 9.95.	

## VWAWA-MLOWO WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	1,693 m <sup>3</sup> /day
Production capacity/day	5,538 m <sup>3</sup> /day
Treatment type	Chlorination
Storage capacity	928 m <sup>3</sup>
Length of Water network	127.3 km

### Service Connections

Total water connections	1,814
Domestic water connections	1,711
Metered water connections	535

### Service Indicators

Water Service Coverage	43.0%
Population directly served	39%
Service hours	6.8 hours
Per capita consumption	16 l/c/d
Average Tariff	395 TZS/m <sup>3</sup>
Complaints/1000 connection	399

### Efficiency Indicators

Non-Revenue Water	34.71%
Revenue collection efficiency	98%
Unit production cost	138 TZS/m <sup>3</sup>
Operating ratio	1.72
Working ratio	0.88
Accounts receivables	4.3 months
Staff/1000 total connections	9.95
Number of Sewer Blockage	N/A
Water Quality Compliance	65%

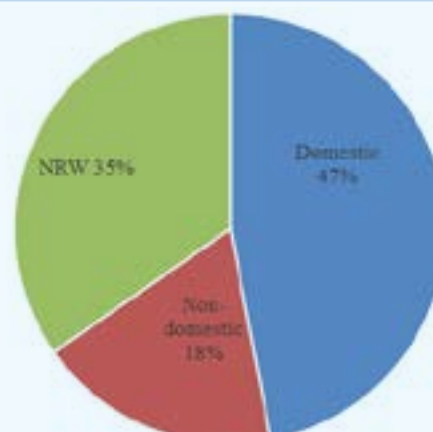
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 91,227,870.00
Government /Donor Grants	TZS 0.00
Amortized Grants	TZS 0.00
Other income	TZS 4,798,500.00

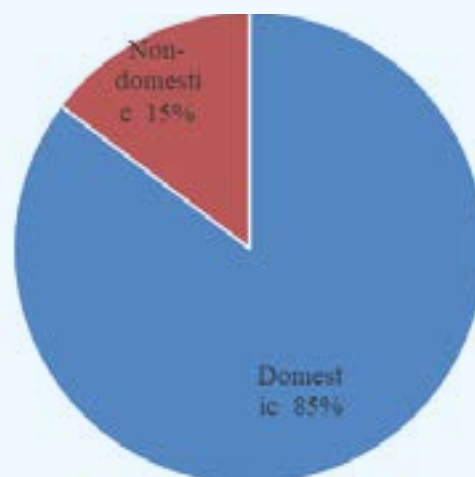
**TOTAL INCOME TZS 96,026,370.00**

Water Production Expenses	TZS 17,826,420.00
Water distribution Expenses	TZS 0.00
Maintenance and Repair	TZS 7,984,800.00
Personnel Expenses	TZS 78,451,000.00
Administration Expenses	TZS 59,330,060.00
Other O & M Expenses	TZS 0.00
Total O & M	TZS 163,592,280.00
Depreciation and Amortization	TZS 0.00

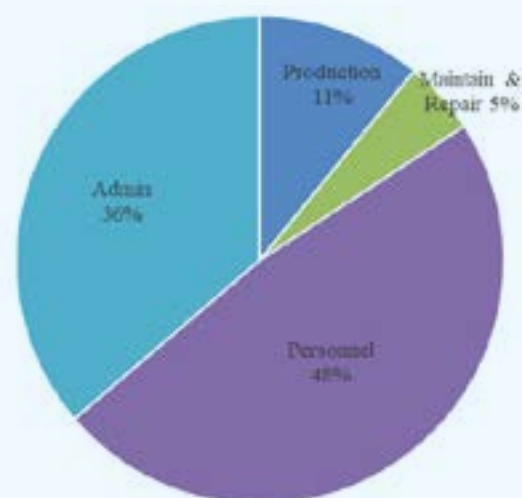
**ANNUAL EXPENDITURE TZS 163,592,280.00**



**ANNUAL WATER USE 403,420 m<sup>3</sup>**



**ANNUAL TER BILLING TZS 97,459,651**



**ANNUAL O&M COSTS TZS 96,026,370.00**



# **NATIONAL PROJECT WSSAs PROFILE**

**CHALINZE WSSA PROFILE**
**2018/19**
**EWURA LICENSE NO: WSSSL/06/2014**

Water Utility	Chalinze Water Supply and Sanitation Authority (Chalinze WSSA) was established and published in the Government Gazette No 378 dated 12 <sup>th</sup> November 2012. Chalinze WSSA operates in parts of three districts namely Bagamoyo, Kibaha, Handeni and Morogoro in Coast, Tanga and Morogoro Regions respectively. Its area of operation has a total population of 260,550, while the current served population is 208,440. Chalinze WSSA abstract water from Wami River, at the intake located at Wami Darajani. The source has a total installed capacity of 7,200m³/day. For the FY 2018/19 Chalinze WSSA had produced an average of 3,865m³/day while estimated water demand is 9,886m³/day. The distribution system has total length of 625 km with 49 storage tanks of 12,550m³. Water is supplied at an average of 13.5hrs /day and none of the customer has 24hours service. Chalinze WSSA has 135 staff, further; it has neither sewerage system nor sewage treatment plant.														
General Data About Water Utility	Total Water Connections	4,459													
	Active Water Connections	4,459													
	Total Staff	135													
	Annual O&M Costs	TZS 4,320,700,000													
	Annual Water and Sewerage Collections	TZS 1,891,350,000													
	Annual Water and Sewerage Billings	TZS 2,126,238,000													
Tariff Structure	<table><tr><th>Category</th><th>Domestic</th><th>Institutions</th><th>Commercial</th><th>Industrial</th></tr><tr><td>TZS./m³</td><td>1,531</td><td>1,557</td><td>1,965</td><td>1,984</td></tr></table> <p><b>Note:</b> Water Kiosk tariff is TZS 50 per 20litre container <b>Effective date of the tariffs: 1<sup>st</sup> April 2016.</b></p>					Category	Domestic	Institutions	Commercial	Industrial	TZS./m³	1,531	1,557	1,965	1,984
Category	Domestic	Institutions	Commercial	Industrial											
TZS./m³	1,531	1,557	1,965	1,984											
Priority of Needs	1. Inadequate water production against demand 2. High receivables 3. Inability to cover O&M cost including investment 4. Inadequate service hours 5. Lack of sewerage services														
Customer Service	Average monthly water consumption is about 10.22m³ per domestic connection with per capita consumption of 14lts/day. Water is available at an average of 13.5 hours a day. The quality of the water produced do not comply with the required standard especially on Residual Chlorine. During the year under review, there were 878 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 197 and 16% of the total complaints were related to billing.														
Performance Highlights	Chalinze WSSA provides water supply direct to 80% of the population in its service area. NRW has been improving over the past three years; it has decreased from 32.9% in FY 2016/17 to 25.8% in FY 2018/19. The Wami water production facility is partially metered however all customer water connections are metered. Operating and working ratios are high at 1.93 and 1.66 respectively. Accounts receivable equivalent is unsatisfactory at 3.27 months. Average tariff at TZS 1,923 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 30														

## CHALINZE WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	3,865m <sup>3</sup>
Production capacity/day	7,200m <sup>3</sup>
Treatment type	Conventional
Storage capacity	12,750m <sup>3</sup>
Length of Water network	627km

### Service Connections

Total water connections	4,459
Active water connections	4,459
Domestic water connections	3,269
Metering Ratio	100%

### Service Indicators

Population living in network area	90%
Population directly served	80%
Service hours	13.5
Per capita consumption	14l/c/d
Average Tariff	1,923 TZS/m <sup>3</sup>
Complaints/1000 connection	197

### Efficiency Indicators

Non-Revenue Water	25.8%
Revenue collection efficiency	90.8%
Unit production cost	3063TZS/m <sup>3</sup>
Operating ratio	1.93
Working ratio	1.66
Account receivable	3.27
Staff/1000 total connections	30

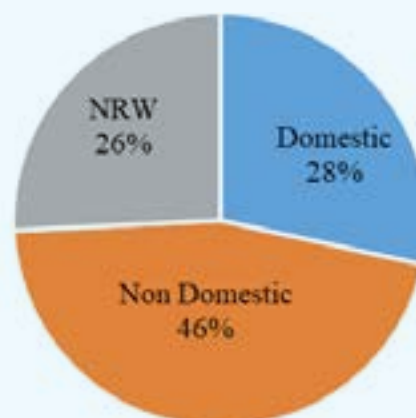
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 2,126,238,000.00
Government /Donor Grants	TZS 1,353,859,000.00
Amortized Grants	TZS -
Other income	TZS 91,081,000.00

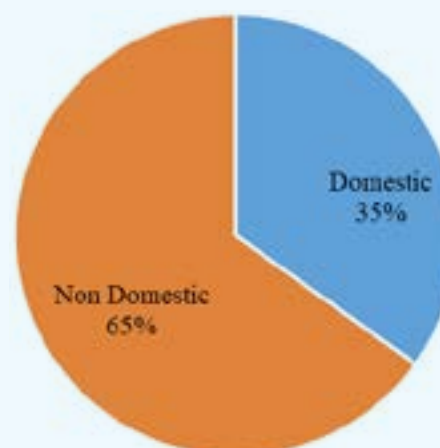
### TOTAL INCOME TZS 3,571,178,000.00

Water Production Expenses	TZS 759,580,000.00
Water distribution Expenses	TZS 742,072,000.00
Maintenance and Repair	TZS 236,762,000.00
Personnel Expenses	TZS 1,372,330,000.00
Administration Expenses	TZS 520,966,000.00
Other O&M Expenses	TZS 101,249,000.00
Total O&M	TZS <b>3,732,959,000.00</b>
Depreciation & Amortization	TZS 587,741,000.00

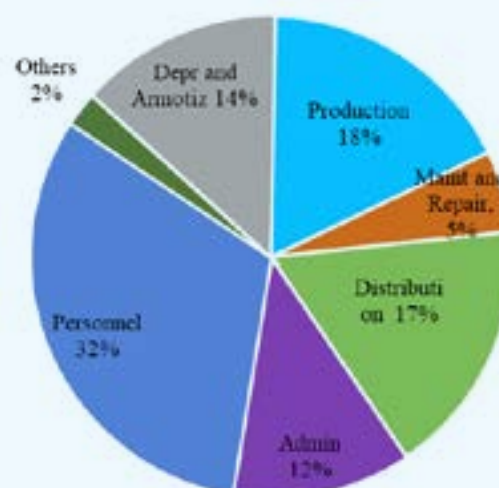
### ANNUAL EXPENDITURE TZS 4,320,700,000.00



ANNUAL WATER USE: 1,410,589 m<sup>3</sup>



ANNUAL WATER AND SEWERAGE BILLING  
TZS 2,126,238,000.00



ANNUAL O&M COSTS TZS 4,320,700,000.00

**HTM WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/14/11**

Water Utility	Handeni Trunk Main (HTM) Water Supply Authority is an autonomous public water utility that became commercially operational in 2004. It is responsible for providing water supply services to the Handeni District and parts of Korogwe District. HTM is located in the Korogwe and Handeni Districts, Tanga region, and serves 6 small towns including the Handeni Urban, 74 registered villages and 3 camps. HTM water supply authority is classified as Category C. It receives Government subsidies to cover the salaries of staff and part of electricity costs. Its area of responsibility has a total population of 375,223 people out of whom 281,417 are supplied with water from the utility. HTM water supply system comprises of gravity and pumping systems with two intakes both drawing water from the Pangani River. The installed production capacity is 9,158m3/ day which is not sufficient to meet the estimated water demand of 14,378 m3/day. The total length of the pipe network is 473km and water is supplied at an average of 3hrs/day. No water treatment process is currently done due to lack of electricity supply at the conventional treatment plant. HTM has a staff complement of 77.							
General Data About Water Utility	Total Water Connections		2,435					
	Active Water Connections		1,863					
	Total Staff		73					
	Annual O&M Costs		TZS 1,656,180,299.00					
	Annual Water and Sewerage Collections		TZS 498,953,864.00					
	Annual Water and Sewerage Billings		TZS 614,181,785.20					
Tariff Structure	Category	Domestic	Institutions	Commercial	Industrial/ Irrigation	Bulk	Cattle trough	Kiosk
	TZS/m³	2,500	2,750	2,972	3,470	1,680	1,680	2,500
	Water Tariff Effective date of the tariffs: 1 <sup>st</sup> May 2019							
Priority of Needs	1. Investment fund for rehabilitation of existing water treatment plants and water supply infrastructure. 2. Reduction of Non-Revenue Water to the acceptable level 3. Improve quality of service delivery and increase customer base.							
Customer Service	Average monthly water consumption is about 8.45m³ per domestic connection. Water is available at an average of 3 hours a day. The water quality is unsatisfactory, with overall zero compliance to TBS limits. During the year under review, HTM WSSA did not receive any complaint during the period under review.							
Performance Highlights	HTM WSSA provides water supply direct to 75% of the population in its service area. NRW is very high at 76 slightly improved from 79.26 reported during the last year review. Bulk meters are installed at production points and all customer connections are metered. The operating and working ratios is not satisfactory at 2.69 and 2.32 respectively. Accounts receivable equivalent is 4.24 months. The average tariff at TZS 2,473 per m³ is not sufficient to cover operating expenses and investment due to poor condition of the existing infrastructure which is the main cause of high NRW. Staff per 1000 connections is very high at 41 and this has been due to low customer base due to bulk water supply.							

## HTM WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	3,732 m <sup>3</sup>
Production capacity/day	9,158 m <sup>3</sup>
Treatment type	Chlorination
Storage capacity	6,264m <sup>3</sup>
Distribution pipe network	473km

### Service Connections

Total water connections	2,435
Domestic water connections	2,000
Metered water connection	100%

### Service Indicators

Water Service Coverage	75%
Service hours	3
Average Tariff	2,473 TZS/m <sup>3</sup>
Complaints/1000 connection	0

### Efficiency Indicators

Non-Revenue Water	76%
Revenue collection efficiency	90%
Unit production cost	1,216 TZS/m <sup>3</sup>
Working ratio	2.32
Operating ratio	2.69
Accounts receivables	4.24
Staff/1000 total connections	41

### Income and Expenditure

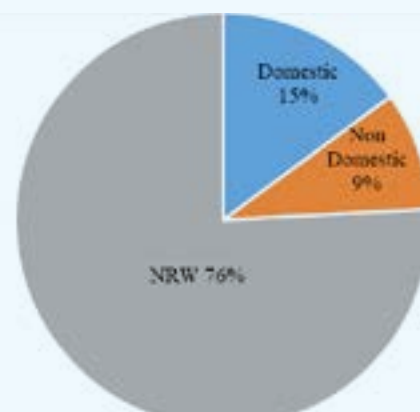
Annual operating income from Water services	TZS 614,181,785.20
Government Grants/Subsidies	TZS 2,631,263,184.57
Other billing income	TZS 0.00
<b>TOTAL INCOME</b>	<b>TZS 3,245,444,970.00</b>

Water Production Expenses	TZS 509,308,724.00
Maintenance and Repair	TZS 40,260,734.00
Water Distribution	TZS 143,729,286.00
Personnel Expenses	TZS 550,819,300.00
Administration Expenses	TZS 117,866,998.00
Other O&M Expenses	TZS 63,728,139.00

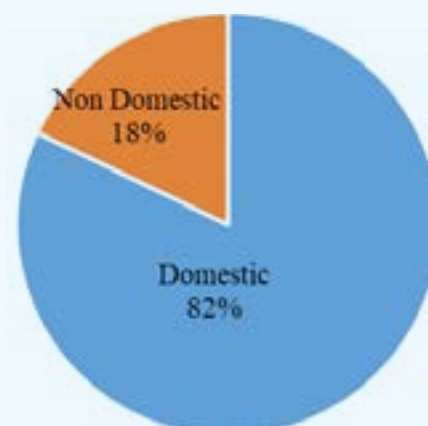
**Total O&M TZS 1,425,713,181.00**

Depreciation & Amortization TZS 230,467,118.00

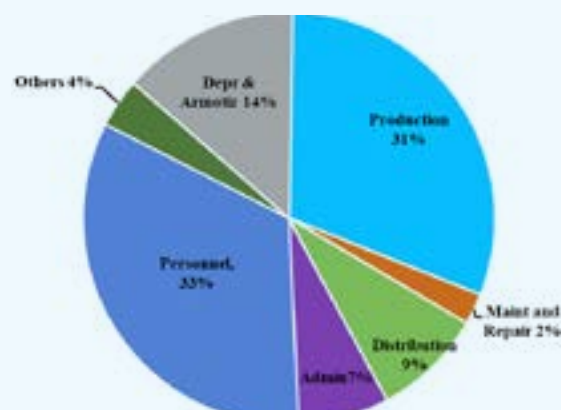
**ANNUAL EXPENDITURE TZS 1,656,180,299.00**



Annual Water Use: 1,362,126m<sup>3</sup>  
**ANNUAL WATER USE: 1,711,714 m<sup>3</sup>**



Annual Water Billing TZS 614,181,785.20  
**ANNUAL WATER AND SEWERAGE BILLING TZS 542,368,220**



**Annual Expenditure TZS 1,656,180,299.00**

**KAHAMA - SHINYANGA WSSA PROFILE**  
**EWURA CLASS III LICENSE NO: WSSSL/65/2012**
**2018/19**

Water Utility	Kahama-Shinyanga Water Supply and Sanitation Authority (Kahama-Shinyanga WSSA), is a fully autonomous public utility responsible for supplying bulk water to other water entities located in the urban and rural areas around Lake Zone. Currently Kahama-Shinyanga WSSA supplies bulk water to water entities in the urban towns of Shinyanga and Kahama plus 60 villages scattered within 5km from the transmission main pipeline in the districts of Misungwi, Kwimba, Shinyanga Rural and Kahama. The utility draws water from Lake Victoria at a location called Smith Sound bay, Misungwi District. Water services are available at an average of 23 hours per day. Kahama-Shinyanga WSSA has a water quality monitoring program, of which it employs water quality laboratory services from Shinyanga regional water quality laboratory to audit the quality of water. Kahama-Shinyanga WSSA has a total work force of 75, and currently it is implementing its Client Service Charter.			
General Data About Water Utility	Total Water Connections	74		
	Active Water Connections	74		
	Total Staff	75		
	Annual O&M Costs	TZS 11,136,426,000.00		
	Annual Water and Sewerage Collections	TZS 11,613,117,000.00		
	Annual Water and Sewerage Billings	TZS 11,610,378,000.00		
Tariff Structure	Water Tariff			
	Category	WSSSAs	COWSs	Mining
	Mining	TZS/m³	TZS/m3	TZS/m3
	Consumption Charge	848	636	1,250
	Effective date of the tariffs: 1 <sup>st</sup> January, 2019			
Priority of Needs	1. Extension of water distribution network to uncovered areas. 2. Reduction of NRW 3. Revival of the Programmed Logical Control system at Ihelele water treatment plant 4. Initiation and implementation of strategies for alternative power supply at Ihelele Water Treatment Plant.			
Customer Service	Average monthly water consumption is about 290m³ per domestic connection with daily per capita consumption of 35 liters. Water is available at an average of 23 hours a day .Water quality is good, with overall average compliance of 100%. There were 8 customer complaints reported and were all resolved. The total number of complaints per 1000 connections is 127 and 75% of the total complaints are leakages related.			
Performance Highlights	Kahama-Shinynga WSSA provides bulk water supply direct to the population in its service area at an average of 23hours per day.. All production points and 92% of customers are metered. Operating ratio is at 1.4 and working ratio is at 1.2. Average tariff at TZS 832 per m³.			

# KAHAMA - SHINYANGA WSSA PROFILE

2018/19

## Production/Distribution

Average daily production	40,875m <sup>3</sup>
Production capacity/day	80,000m <sup>3</sup>
Treatment type	Conventional
Storage capacity	35,000m <sup>3</sup>
Service area	1080km <sup>2</sup>
Length of the network	319 km

## Service Connections

Total water connections	71
Domestic water connections	65
Metered connections	92%

## Service Indicators

Service hours	23hrs
Complaints/1000 connections	127

## Efficiency Indicators

Non-Revenue Water	9%
Revenue collection efficiency	95%
Unit production cost	872.2 TZS/m <sup>3</sup>
Operating ratio	0.96
Working ratio	0.81

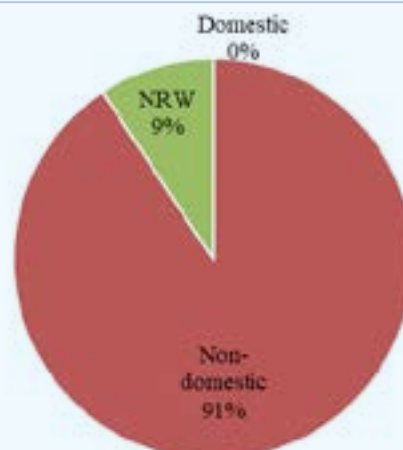
## Income and Expenditure

Annual operating income from water and sewerage services	TZS 6,064,088,000.00
Government /Donor Grants	TZS 950,393,000.00
Amortized Grants	
Other income	TZS 1,991,000.00
<b>TOTAL INCOME</b>	<b>TZS 12,565,501,000.00</b>

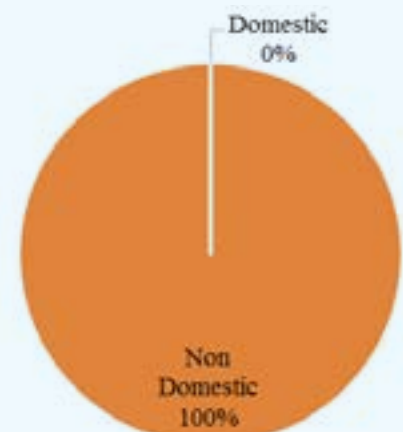
Water Production Expenses	TZS 6,064,088,000.00
Water distribution expenses	TZS 2,480,000.00
Maintenance and Repair	TZS 178,143,000.00
Personnel Expenses	TZS 1,629,859,000.00
Administration Expenses	TZS 1,578,582,000.00
Sewerage Expenses	TZS N/A
Other O&M Expenses	TZS
<b>Total O&amp;M expenses</b>	<b>TZS 9,453,152,000.00</b>

Depreciation & Amortization	TZS 1,683,274,000.00
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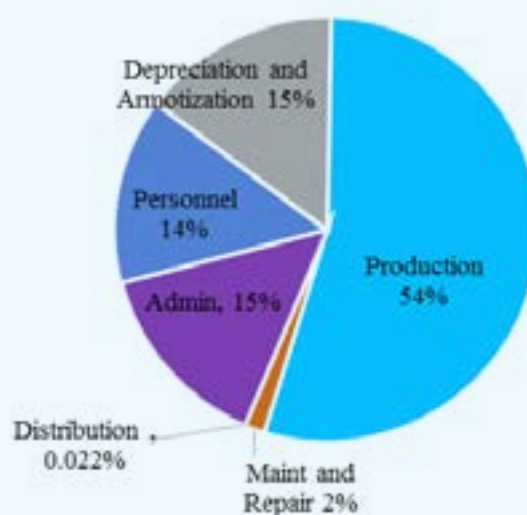
**ANNUAL EXPENDITURE TZS 11,136,426,000.00**



**ANNUAL WATER USE: 15,417,196m<sup>3</sup>**



**ANNUAL WATER BILLING  
TZS 11,610,378,000**



**ANNUAL EXPENDITURE TZS 11,136,426,000.00**

**MAKONDE WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/30/2012**

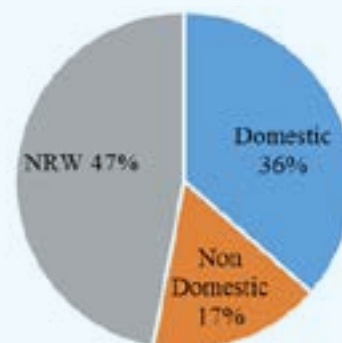
Water Utility	Makonde WSSA was established in November, 2003. Makonde WSSA operates in three districts namely Newala, Tandahimba and Mtwara in Mtwara Region. Its area of operation has a total population of 509,693, while the current served population is 276,764 Makonde WSSA abstract water from two types of sources which are spring sources namely Mkunya and Mahuta, as well as six boreholes located at Mitema. The sources altogether have the total installed capacity of 10,695 m³/day. For the FY 2018/19 Makonde WSSA produced an average of 598,440 m³ of water which was insufficient as compared to estimated water demand of 20,439 m³/ day. The distribution system has total length of 1,331km with 169 storage tanks of 14,360m³. Water is supplied at an average of 4hrs /day and none of the customers has 24 hours service. Makonde WSSA has 72 staff, further, it has neither sewerage system nor sewage treatment plant.				
General Data About Water Utility	Total Water Connections	3,089			
	Active Water Connections	1,717			
	Total Staff	72			
	Annual O&M Costs	TZS 1,785,871,949.00			
	Annual Water Collections	TZS 231,891,271.72			
	Annual Water and Sewerage Billings	TZS 146,143,040.00			
Tariff Structure	Water Tariff				
	Category	Band m3	2018/19	2019/20	2020/21
	Domestic	0 - 9	1,300	1,300	1,300
		>9 - 20	1,300	1,300	1,300
		> 20	1,400	1,400	1,400
	Institution		1,500	1,500	1,500
	Commercial		1,600	1,600	1,600
	Industrial		1,900	1,900	1,900
	Kiosk		1,000	1,000	1,000
	Browsers		5,000	5,000	5,000
	Note: Effective date of the tariffs: 15 <sup>th</sup> February 2019.				
Priority of Needs	1. Inadequate water production against demand; 2. Inadequate water supply service coverage 3. High NRW 4. Inefficient revenue collection 5. High receivables.				
Customer Service	Average monthly water consumption is about 5.9m³ per domestic connection with per capita consumption of 19.6lts/day. Water is available at an average of 4hours a day. The quality of the produced water do not comply with the required standard. During the year under review, there were 1,674consumer complaints reported of which 1,100 were resolved. The total number of complaints per 1000 connections is 712.3 and the highest proportion of complaints was on lack of water (52%).				
Performance Highlights	Makonde provides water supply direct to 29% of the population in its service area. NRW is on the higher side, it is averaging at 47%. Bulk meters are installed at all water production points and 92% of the customer water connections are metered. Operating and working ratios are high at 5.9 and 5.7 respectively. Accounts receivable equivalent is unsatisfactory at 31.6 months. Average tariff at TZS 1,300 per m³ is insufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is high at 23.3.				

## MAKONDE PLATEAU WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	1,850 m <sup>3</sup>
Production capacity/day	10,695 m <sup>3</sup>
Treatment type	Chlorine Dosing
Storage capacity	13,670 m <sup>3</sup>
Length of Water network	1,331km



**Annual Water Use: 2,117,375m<sup>3</sup>**

### Service Connections

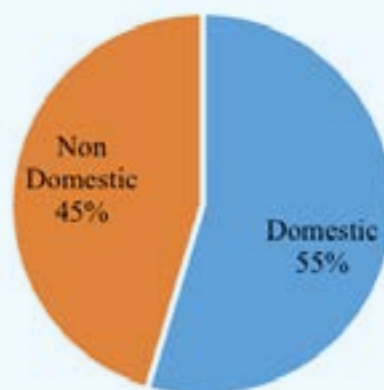
Total water connections	3,089
Active water connections	1,717
Domestic water connections	2,205
Metering Ratio	92%

### Service Indicators

Population living in network area	54.3%
Population directly served	29%
Service hours	4
Per capita consumption	19.6l/c/d
Average Tariff	1,300 TZS/m <sup>3</sup>
Complaints/1000 connection	712.3

### Efficiency Indicators

Non-Revenue Water	47%
Revenue collection efficiency	30.2% (including arrears)
Unit production cost	2,457 TZS/m <sup>3</sup>
Operating ratio	5.9
Working ratio	5.7
Accounts receivables	31.6
Staff/1000 total connections	23.3



**ANNUAL WATER BILLING  
TZS 117,784,960.00**

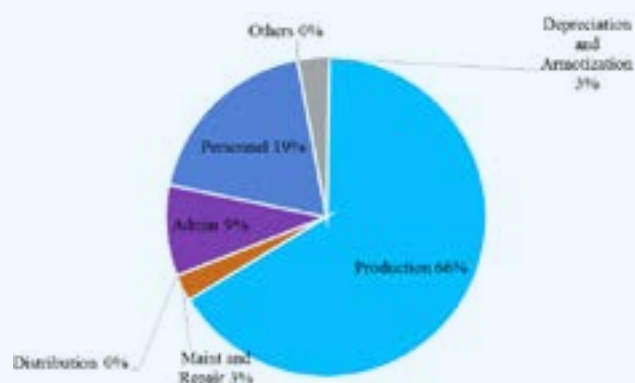
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 146,143,040.00
Government /Donor Grants	TZS 877,028,732.00
Amortized Grants	TZS -
Other income	TZS 17,440,000.00
<b>TOTAL INCOME</b>	<b>TZS 1,196,797,162</b>

Water Production Expenses	TZS 1,180,478,781.00
Water distribution Expenses	TZS
Maintenance and Repair	TZS 47,512,700 .00
Personnel Expenses	TZS 337,479,750.00
Administration Expenses	TZS 164,204,003.00
Other O&M Expenses	TZS -

**Total O&M TZS 1,729,675,234.00**

Depreciation & Amortization TZS 56,196,715.00  
**ANNUAL EXPENDITURE TZS 1,785,871,949.00**



**ANNUAL EXPENDITURE TZS 1,785,871,949.00**

**MASASI-NACHINGWEA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/06/2014**

Water Utility	Masasi -Nachingwea Water Supply Authority (MANAWASA) was established by Act No. 8 of 1997 on 10 <sup>th</sup> May, 2013. MANAWASA operates in two districts namely Masasi in Mtwara Region and Nachingwea in Lindi Region. Its area of operation has a total population of 256,765 people, while the current served population is 191,955. MANAWASA abstract water from spring sources namely Mbwinji and Mwena, however, there are other five boreholes located at Magumuchila ‘A’ and ‘B’ and Chisegu in Masasi which are not operational. The sources altogether have a total installed capacity of 14,491m³/day. For the FY 2018/19 MANAWASA had water demand of 11,572m³/day. The distribution system has total length of 517km with storage capacity of 27,500m³. Water is supplied at an average of 22hrs /day. MANAWASA has 73 staff. It has neither sewerage system nor sewage treatment plant.					
General Data About Water Utility	Total Water Connections	10,020				
	Active Water Connections	9,131				
	Total Sewerage Connections	-				
	Total Staff	73				
	Annual O&M Costs	TZS 2,360,519,529.00				
	Annual Water and Sewerage Collections	TZS 2,566,998,095.45				
	Annual Water and Sewerage Billings	TZS 2,541,369,300.00				
Tariff Structure	Water Tariff					
	Category	Domestic	Institutional	Commercial	Bowser	Industrial Consumer
	<30m³	1,200	1,600	2,000	2,250	2,500
	>30m³	1,400				
	Note: Water Kiosk tariff is TZS 45 per 20litre container					
Effective date of the tariffs: 1 <sup>st</sup> October 2016.						
Priority of Needs	1. Inadequate water production against demand; 2. Inadequate water supply service coverage 3. Absence of sewerage services 4. High receivables. 5. Inefficient staff to connection ratio					
Customer Service	Average monthly water consumption is about 9.4m³ per domestic connection with per capita consumption of 11lts/day. Water is available at an average of 22 hours a day. Water quality meets the required standard with overall average compliance of 100%. During the year under review, there were 1,463 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 146.					
Performance Highlights	MANAWASA provides water supply direct to 77% of the population in its service area, with NRW of 25%. Bulk meters are installed at all water production points and all customer water connections are metered. Operating and working ratios are at 1.2 and 0.84 respectively. Accounts receivable equivalent is unsatisfactory at 3.7 months. Average tariff at TZS 1,557 per m³ is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is high at 7.					

## MASASI-NACHINGWEA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	5,801m <sup>3</sup>
Production capacity/day	14,491m <sup>3</sup>
Treatment type	partial conventional
Storage capacity	27,500m <sup>3</sup>
Length of Water network	517km

### Service Connections

Total water connections	10,020
Active water connections	9,131
Domestic water connections	9,126
Metering Ratio	100%

### Service Indicators

Population living in network area	88%
Population directly served	77%
Service hours	22
Per capita consumption	11l/c/d
Average Tariff	1,557 TZS/m <sup>3</sup>
Complaints/1000 connection	146

### Efficiency Indicators

Non-Revenue Water	25%
Revenue collection efficiency	101%
Unit production cost	1,597.5 TZS/m <sup>3</sup>
Operating ratio	1.2
Working ratio	0.84
Account receivable	2.89
Staff/1000 total connections	7

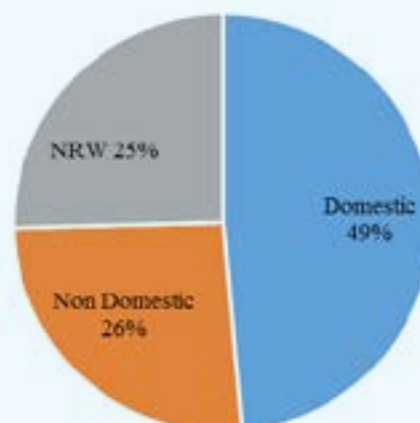
### Income and Expenditure

Annual operating income from water and sewerage services	TZS 2,819,412,444.00
Government /Donor Grants	TZS 3,625,789.00
Amortized Grants	TZS -
Other income	TZS 85,556,055.00

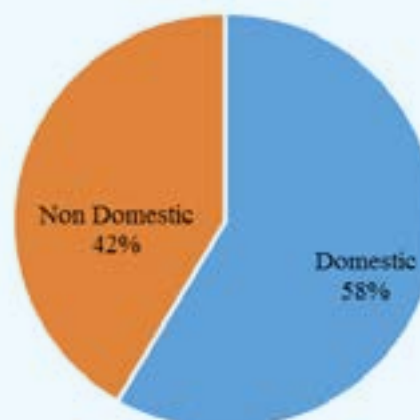
**TOTAL INCOME TZS 2,908,594,288.00**

Water Production Expenses	TZS 57,212,483.00
Water distribution Expenses	TZS 445,004,347.00
Maintenance and Repair	TZS 19,792,680.00
Personnel Expenses	TZS 1,129,661,152.00
Administration Expenses	TZS 717,848,867.00
Other O&M Expenses	TZS -
Total O&M	TZS <b>2,360,519,529.00</b>
Depreciation & Amortization	TZS 1,021,976,284.00

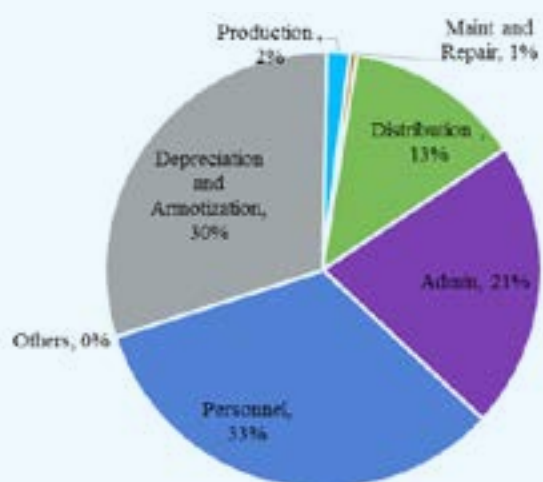
**ANNUAL EXPENDITURE TZS 3,382,495,813.00**



**ANNUAL WATER USE: 2,117,375 m<sup>3</sup>**



**ANNUAL WATER BILLING TZS 2,444,230,260**



**ANNUAL EXPENDITURE TZS 3,382,495,813.00**

**MASWA WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/62/2012**

<b>Water Utility</b>	Maswa Water Supply and Sanitation Authority (Maswa WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services in Maswa District Council. Its area of operation has a total population of 124,459 people while the served population is 78,000 people (About 92,598 people are living in area with water network). The utility draws water from New Sola and and five boreholes located at Madeco Farm, Uzunguni, Mwanguhi, Sola and Badabada. Water services are available at an average of 10 hours per day. The Utility does not have sewerage system and sewage treatment plant. Sanitation services are operated under the supervision of Maswa District Council. Maswa WSSA has a water quality monitoring program, of which it employs water quality laboratory services from Shinyanga regional water quality laboratory to audit the quality of water. MaswaWSSA has a total work force of 31.				
<b>General Data About Water Utility</b>	Total water connections	3,622			
	Active water connections	2,571			
	Total staff	31			
	Annual O&M costs	TZS 847,324,967.00			
	Annual water and sewerage collections	TZS 293,628,877.00			
	Annual water and sewerage billings	TZS 422,395,878.64			
<b>Tariff Structure</b>	<b>Water Tariff</b>				
	<b>Category</b>	<b>Domestic</b>	<b>Institutional</b>	<b>Commercial</b>	<b>Industrial</b>
	Metered Customers (TZS/m³)	1,100	1,300	1,600	2,400
	Flat rate charge (TZS/month)	17,600	26,000	32,000	240,000
	Effective date of the tariffs: 1 <sup>st</sup> May, 2019				
<b>Priority of Needs</b>	1. Construction of wastewater treatment facilities 2. Increase customer base. 3. Extension of water network. 4. Reduction of NRW to the acceptable level 5. Additional of water sources 6. Improve revenue collection efficiency				
<b>Customer Service</b>	Average monthly water consumption is about 18.7m³ per domestic connection with daily per capita consumption of 19liters. Water is available at an average of 10 hours a day .Water quality is good, with overall average compliance of 92.5%. There were 1,244 customer complaints reported and all complaints were resolved. The total number of complaints per 1000 connections is 8.6 and 61% of the total complaints are bill related.				
<b>Performance Highlights</b>	Maswa WSSA provides water supply direct to 48% of the population in its service area at an average of 10hours per day. The NRW is 36.6%. Average tariff at TZS 1,188per m³. Staff/1000 connections ratio is 8.6				

## MASWA WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	5,340.6m <sup>3</sup>
Production capacity/day	10,356m <sup>3</sup>
Treatment type	Conventional
Storage capacity	825m <sup>3</sup>
Service area	1080km <sup>2</sup>
Length of the network	166km

### Service Connections

Total water connections	3,622
Domestic water connections	3,070
Metered connections	65%

### Service Indicators

Population living in area with water network	74.4
Population directly served	48
Service hours	10 hrs
Average Tariff	1100
Complaints/1000 connections	97

### Efficiency Indicators

Non-Revenue Water	36.6%
Revenue collection efficiency	79.8%
Unit production cost	1,188TZS/m <sup>3</sup>
Operating Ratio	2.5
Working Ratio	1.1
Accounts receivables	6.4
Staff/1000 connections	8.6

### Income and Expenditure

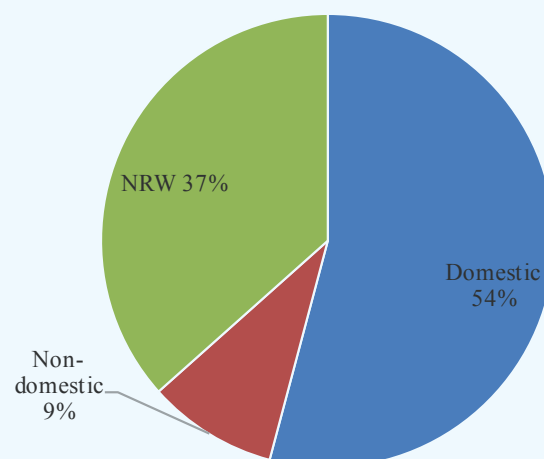
Annual operating income from water and sewerage services	TZS 311,629,242.00
Government /Donor Grants	TZS 404,034,028.00
Amortized Grants	TZS -
Other income	TZS 21,855,479.00

### TOTAL INCOME

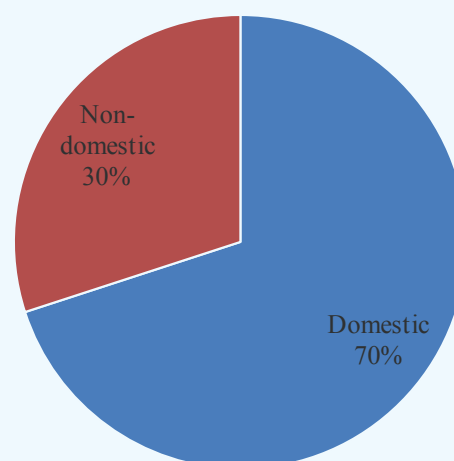
**TZS 737,518,749.00**

Water Production Expenses	TZS 274,530,000.00
Water distribution expenses	TZS -
Maintenance and Repair	TZS 144,882,536.00
Personnel Expenses	TZS 99,120,100.00
Administration Expenses	TZS 122,868,535.00
Sewerage Expenses	TZS N/A
Other O&M Expenses	TZS -
<b>Total O&amp;M expenses</b>	<b>TZS 642,351,171.00</b>
Depreciation & Amortization	TZS 204,973,796.00

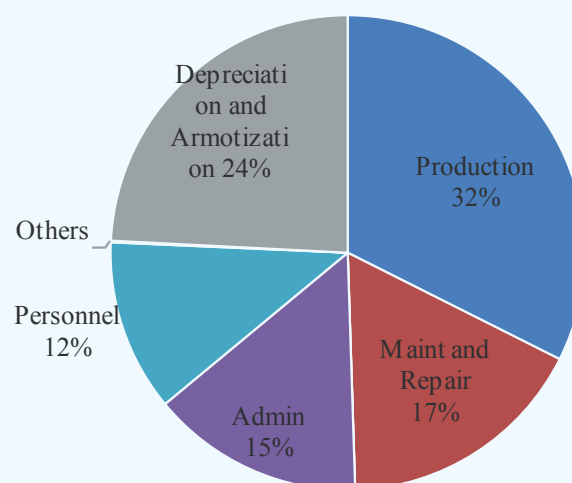
**ANNUAL EXPENDITURE TZS 847,324,967.00**



**ANNUAL WATER USE: 1,949,240 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 311,629,242.00**



**ANNUAL EXOENDITURE TZS 847,324,967.00**

**MGANGO - KIABAKARI WSSA PROFILE**  
**EWURA CLASS III LICENSE NO: WSSSL/78/2012**
**2018/19**

<b>Water Utility</b>	Mugango-Kiabakari Water Supply and Sanitation Authority (Mugango-kiabakari WSSA), is a fully autonomous public utility responsible for the overall operation and management of water supply and sanitation services within 13 villages in Mugango, Kiabakari and Butiama District Council. Its area of operation has a total population of 177,494.00 people. The served population is 50% of people living in the area with water networks). The utility draws water from Lake Victoria from the intake located at Mugango village. The source has a total installed production capacity of 9,600m³/day while water demand stands at 9,600m³/day. Water services are available at an average of 8 hours per day. The Utility does not have sewerage system and sewage treatment plant. Sanitation services are operated under the supervision of Butiama District Council. Mugano-Kiabakari WSSA has a water quality monitoring program, of which it employs water quality laboratory services from Mara regional water quality laboratory to audit the quality of water. Mugango-Kiabakari WSSA has a total work force of 24, and currently it is implementing the Client Service Charter.				
<b>General Data About Water Utility</b>	Total water connections	962			
	Active water connections	590			
	Total Staff	24			
	Annual O&M costs	TZS 604,232,106.00			
	Annual water collections	TZS 87,164,880.00			
	Annual water billings	TZS 106,923,749.00			
<b>Tariff Structure</b>	<b>Water Tariff</b>				
	<b>Category</b>	<b>Domestic</b>	<b>Institutional</b>	<b>Commercial</b>	<b>Industrial</b>
	Consumption charge (TZS/m³)	345	335	510	-
	Flat rate charge (TZS/Month)	8,500	26,000	16,500	-
	Effective date of the tariffs: 1 <sup>st</sup> June, 2011				
<b>Priority of Needs</b>	1. Reduction of NRW to the acceptable level 2. Construction of water treatment facility 3. Rehabilitation of obsolete old and dilapidated water network 4. Increase customer base				
<b>Customer Service</b>	Water is available at an average of 8 hours a day .Water quality is fair, with overall average compliance of 60%. There were 295 customer complaints reported and 295 were resolved.				

## MUGANGO - KIABAKARI WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	2,890m <sup>3</sup>
Production capacity/day	9,600m <sup>3</sup>
Treatment type	Chlorine dosage
Storage capacity	2,274m <sup>3</sup>
Service area	1080km <sup>2</sup>
Length of the network	110km

### Service Connections

Total water connections	962
Active connections	
Domestic water connections	870
Metered connections	100%

### Service Indicators

Population living in area with network	
Population directly served	
Service hours	8hrs
Per capita consumption	
Average Tariff	
Complaints/1000 connections	

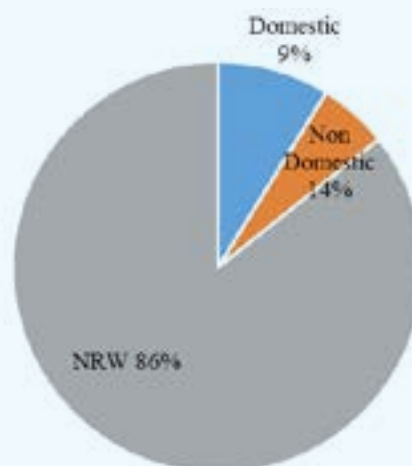
### Efficiency Indicators

Non-Revenue Water	86%
Revenue collection efficiency	81%
Unit production cost	462.6TZS/m <sup>3</sup>
Operating ratio	
Woring ratio	
Accounts receivable	
Staff/1000 connections	

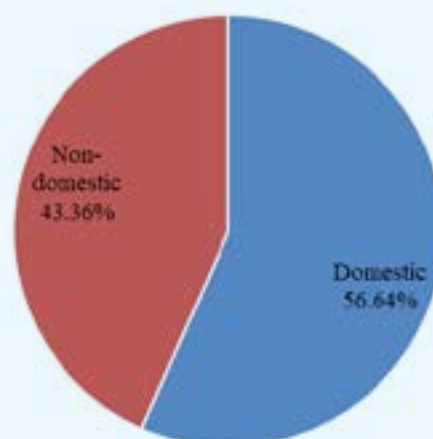
### Income and Expenditure

Annual operating income from water services	TZS 87,164,880.00
Government /Donor Grants	TZS 572,566,510.00
Amortized Grants	TZS -
Other income	TZS 1,835,000.00
<b>TOTAL INCOME</b>	<b>TZS 661,566,890.00</b>

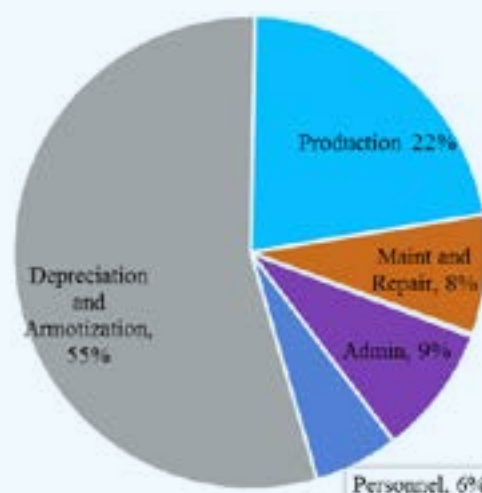
Water Production Expenses	TZS 296,288.00
Water distribution expenses	TZS 3,410,000.00
Maintenance and Repair	TZS 108,151,601.00
Personnel Expenses	TZS 61,164,850.00
Administration Expenses	TZS 118,421,378.00
Sewerage Expenses	TZS N/A
Other O&M Expenses	TZS -
<b>Total O&amp;M expenses</b>	<b>TZS 604,232,106.00</b>
Depreciation & Amortization	TZS -
<b>ANNUAL EXPENDITURE</b>	<b>TZS 604,232,106.00</b>



**ANNUAL WATER USE: 1,054,940 m<sup>3</sup>**



**ANNUAL WATER AND SEWERAGE BILLING  
TZS 106,923,749**



**ANNUAL EXPENDITURE TZS 604,232,106.00**

**WANGING'OMBE WSSA PROFILE**
**2018/19**
**EWURA CLASS III LICENSE NO: WSSSL/01/2016**

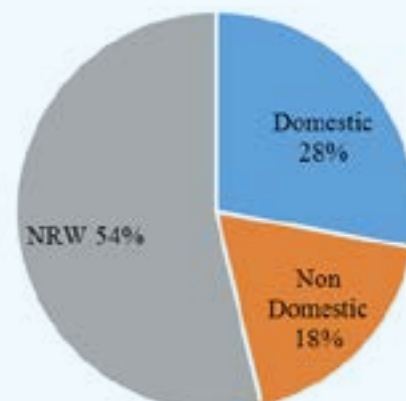
<b>Water Utility</b>	Wanging’ombe WSSA is an autonomous Public Water Utility responsible for the overall operation and management of the water supply and sanitation services in Wanging’ombe District that has both rural and urban settings. Its area of operation has a total population of 95,068 people, while the current directly served population is 75,000. Wanging’ombe WSSA abstract water from two river sources namely Mbukwa and Mtitafu. The source has the total installed capacity of 7,300/day. Average water production for the FY 2018/19 was 4,290 m³/day while estimated water demand is 10,665m³/day. The distribution system has total length of 398km with 60 storage tanks with storage capacity of 4,392m³. Water is supplied at an average of 16hrs /day. Wanging’ombe WSSA has 51 staff and it has neither sewerage system nor sewage treatment plant.					
<b>General Data About Water Utility</b>	Total Water Connections	5,393				
	Active Water Connections	4,857				
	Total Sewerage Connections	-				
	Total Staff	51				
	Annual O&M Costs	TZS 659,358,000.00				
	Annual Water Collections	TZS 285,562,838.00				
	Annual Water Billing	TZS 407,198,000.00				
<b>Tariff Structure</b>	<b>Water Tariff</b>					
	<b>Category of Customer</b>	<b>Domestic</b>	<b>Institution</b>	<b>Commercial</b>	<b>Cattle trough</b>	<b>Kiosk</b>
	<b>Metered (TZS/m³)</b>	900	800	1,000	1,000	900
	<b>Flat rate (TZS/Month)</b>	8,000	29,600	35,900	37,700	8,000
	<b>Note:</b> <b>Effective date of the tariffs: 1<sup>st</sup> December 2018.</b>					
<b>Priority of Needs</b>	1. Inadequate water production against demand; 2. High NRW 3. Low water service coverage 4. Dilapidated water Infrastructure 5. Lack water treatment plant.					
<b>Customer Service</b>	Average monthly water consumption is about 7.74m³ per domestic connection with per capita consumption of 13lts/day. Water is available at an average of 16 hours a day. The quality of the produced water do not meet the required standard. During the year under review, there were 208 consumer complaints reported of which all were resolved. The total number of complaints per 1000 connections is 39 and 50% of the total complaints are related lack of water/water pressur which is the highest among all complaints received.					
<b>Performance Highlights</b>	Wanging’ombe WSSA provides water supply direct to 79% of the population in its service area. Although NRW is improving over the past three years, it is still high at 54%. There is no Bulk meter installed at any of the water production points and 87% of the customer water connections are metered. Operating and working ratios are 1.62 and 0.8 respectively. Accounts receivables equivalent is 3.45 months. Average tariff at TZS 1,342 per m³ is not sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is at 11.					

## WANGING'OMBE WSSA PROFILE

2018/19

### Production/Distribution

Average daily production	4,290 m <sup>3</sup>
Production capacity/day	7,300m <sup>3</sup>
Treatment type	No treatment
Storage capacity	4,392 m <sup>3</sup>
Length of Water network	398km



**ANNUAL WATER USE: 1,565, 850 m<sup>3</sup>**

### Service Connections

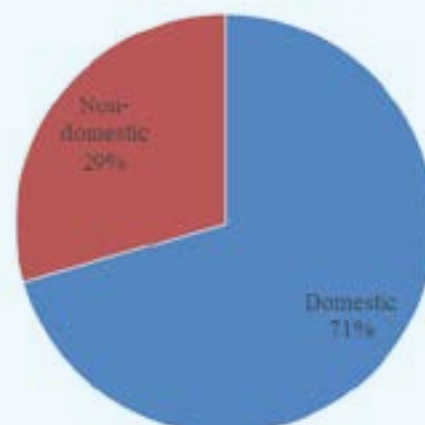
Total water connections	5,393
Active water connections	4,857
Domestic water connections	4,700
Metering Ratio	87%

### Service Indicators

Population living in network area	84%
Population directly served	79%
Service hours	16
Per capita consumption	13l/c/d
Average Tariff	1,342 TZS/m <sup>3</sup>
Complaints/1000 connection	39

### Efficiency Indicators

Non-Revenue Water	54%
Revenue collection efficiency	90% (including arrears)
Operating ratio	1.62
Working ratio	0.8
Accounts receivables	3.45
Staff/1000 total connections	11

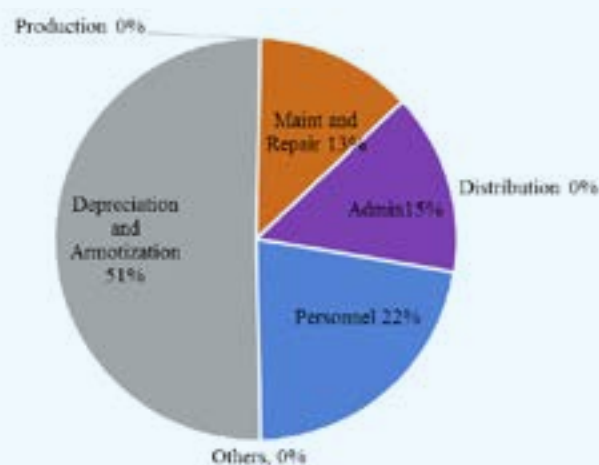


**ANNUAL WATER BILLING  
TZS 290,329,660.00**

### Income and Expenditure

Annual operating income from water services	TZS 407,198,000.00
Government /Donor Grants	TZS 763,139,000.00
Amortized Grants	TZS
Other income	TZS 185,801,000.00
<b>TOTAL INCOME</b>	<b>TZS 1,170,337,000.00</b>

Water Production Expenses	TZS -
Water distribution Expenses	TZS -
Maintenance and Repair	TZS 83,843,000.00
Personnel Expenses	TZS 145,370,000.00
Administration Expenses	TZS 96,616,000.00
Other O&M Expenses	TZS -
Total O&M	TZS <b>325,829,000.00</b>
Depreciation & Amortization	TZS 333,529,000.00
<b>ANNUAL EXPENDITURE</b>	<b>TZS 659,358,000.00</b>



**ANNUAL EXPENDITURE TZS 659,358,000.00**

**APPENDIX 2:**  
**SUMMARY OF THREE YEARS PERFORMANCE**  
**DATA FOR REGIONAL WSSAs**

**Table A2.1(a) : Water Abstraction Trend**

Name of Water Utility	2016/17						2017/18						2018/19					
	B/Holes	Springs	Dams	Lakes	Rivers	Total	B/Holes	Springs	Dams	Lakes	Rivers	Total	B/Holes	Springs	Dams	Lakes	Rivers	Total
<b>Category A</b>																		
Arusha	6.34	5.88	-	-	2.38	<b>14.60</b>	5.97	7.08	0.00	0.00	2.76	<b>15.82</b>	6.07	6.91	-	-	2.72	<b>15.70</b>
DAWASA	1.62				131.14	<b>132.76</b>	1.54				159.58	<b>161.12</b>	1.54				160.45	<b>162.00</b>
Dodoma	14.61	-	-	-	-	<b>14.61</b>	14.46	-	-	-	-	<b>14.46</b>	15.45	-	-	-	-	<b>15.45</b>
Iringa	-	0.82	-	-	4.67	<b>5.49</b>	0.05	0.84	-	-	4.25	<b>5.14</b>	0.10	0.86	-	-	4.10	<b>5.07</b>
Kahama	-	-	-	3.74	-	<b>3.74</b>	-	-	-	-	4.76	<b>4.76</b>	-	-	-	4.08	-	<b>4.08</b>
Mbeya	-	8.28	-	-	6.78	<b>15.06</b>	-	9.61	-	-	7.60	<b>17.21</b>	-	9.81	-	-	7.71	<b>17.52</b>
Morogoro	-	-	9.06	-	2.87	<b>11.92</b>	-	-	9.01	-	2.91	<b>11.92</b>	-	-	9.20	-	2.92	<b>12.12</b>
Moshi	1.42	10.47	-	-	-	<b>11.89</b>	1.31	10.39	-	-	-	<b>11.70</b>	1.50	10.62	-	-	-	<b>12.13</b>
Mtwara	3.31	-	-	-	-	<b>3.31</b>	3.70	-	-	-	-	<b>3.70</b>	4.59	-	-	-	-	<b>4.59</b>
Musoma	-	-	-	4.02	-	<b>4.02</b>	-	-	-	6.48	-	<b>6.48</b>	-	-	-	7.31	-	<b>7.31</b>
Mwanza	-	-	-	29.50	-	<b>29.50</b>	-	-	-	31.57	-	<b>31.57</b>	-	-	-	33.05	-	<b>33.05</b>
Shinyanga	-	-	0.98	3.07	-	<b>4.05</b>	-	-	0.51	3.24	-	<b>3.75</b>	-	-	0.29	3.83	-	<b>4.12</b>
Songea	-	2.10	-	-	0.90	<b>3.00</b>	-	2.36	-	-	0.53	<b>2.89</b>	-	2.07	-	-	0.98	<b>3.06</b>
Tabora	-	-	5.36	-	-	<b>5.36</b>	0.00	-	4.29	-	-	<b>4.30</b>	-	-	5.28	-	-	<b>5.28</b>
Tanga	0.04	-	11.35	-	-	<b>11.40</b>	0.07	-	11.49	-	-	<b>11.56</b>	-	-	11.93	-	-	<b>11.93</b>
<b>SubTotal</b>	<b>27.35</b>	<b>27.56</b>	<b>26.75</b>	<b>40.33</b>	<b>148.73</b>	<b>270.72</b>	<b>27.11</b>	<b>30.29</b>	<b>25.30</b>	<b>46.05</b>	<b>177.63</b>	<b>306.39</b>	<b>29.26</b>	<b>30.28</b>	<b>26.70</b>	<b>48.27</b>	<b>178.89</b>	<b>13.40</b>
<b>Category B and C</b>																		
Bukoba	-	-	-	-	-	-	-	-	-	2.90	-	<b>2.90</b>	-	-	-	3.21	-	<b>3.21</b>
Kigoma	-	-	-	2.69	-	<b>2.69</b>	-	-	-	2.55	-	<b>2.55</b>	-	-	-	3.24	-	<b>3.24</b>
Singida	2.56	-	-	-	-	<b>2.56</b>	2.41	-	-	-	-	<b>2.41</b>	2.58	-	-	-	-	<b>2.58</b>
Sumbawanga	1.00	-	-	-	1.69	<b>2.70</b>	1.02	-	-	-	1.94	<b>2.96</b>	0.22	-	-	-	2.33	<b>2.55</b>
Babati	1.85	0.33	-	-	-	<b>2.18</b>	1.77	0.38	-	-	-	<b>2.15</b>	1.87	0.38	-	-	-	<b>2.25</b>
Lindi	0.28	0.13	-	-	0.00	<b>0.41</b>	0.44	0.07	-	-	0.00	<b>0.51</b>	1.11	0.10	-	-	-	<b>1.21</b>
Bariadi	0.21	-	-	-	-	<b>0.21</b>	0.16	-	-	-	-	<b>0.16</b>	0.20	-	-	-	-	<b>0.20</b>
Geita	0.05	0.00	1.79	-	-	<b>1.84</b>	0.06	0.02	1.48	-	-	<b>1.56</b>	0.39	-	1.52	-	-	<b>1.91</b>
Mpanda	0.04	0.98	0.02	-	0.09	<b>1.13</b>	0.02	0.68	0.05	-	0.17	<b>0.92</b>	0.03	0.93	0.03	-	-	<b>0.99</b>
Njombe	0.00	1.46	-	0.01	-	<b>1.47</b>	0.00	1.12	-	-	-	<b>1.12</b>	-	1.27	-	-	-	<b>1.27</b>
Vwawa-Mlowo	-	-	-	-	-	-	0.02	0.09	-	-	0.75	<b>0.86</b>	0.02	0.09	-	-	0.54	<b>0.64</b>
<b>Sub Total</b>	<b>5.99</b>	<b>2.90</b>	<b>1.81</b>	<b>2.70</b>	<b>1.79</b>	<b>15.19</b>	<b>5.89</b>	<b>2.36</b>	<b>1.53</b>	<b>5.45</b>	<b>2.86</b>	<b>18.09</b>	<b>6.41</b>	<b>2.77</b>	<b>1.55</b>	<b>6.45</b>	<b>2.86</b>	<b>20.05</b>
<b>Total</b>	<b>33.34</b>	<b>30.46</b>	<b>28.56</b>	<b>43.03</b>	<b>150.52</b>	<b>285.91</b>	<b>33.00</b>	<b>32.65</b>	<b>26.83</b>	<b>51.50</b>	<b>180.49</b>	<b>324.48</b>	<b>35.67</b>	<b>33.05</b>	<b>28.25</b>	<b>54.72</b>	<b>181.75</b>	<b>333.45</b>

**Table A2.1(b) Water Abstraction Summary**

Source	2016/17		2017/18		2018/19	
	Abstraction (Million m³)	% contribution to total abstraction	Abstraction (Million m³)	% contribution to total abstraction	Abstraction (Million m³)	% contribution to total abstraction
<b>REGIONAL WSSA WATER SOURCES</b>						
Boreholes	31.72	12%	31.46	19%	34.13	20%
Springs	30.46	11%	32.65	20%	33.05	19%
Dams	28.56	10%	26.83	16%	28.25	16%
Lakes	43.03	15%	51.50	32%	54.72	32%
Rivers	19.38	52.6%	20.92	12.8%	21.30	12.4%
<b>TOTAL</b>	<b>153.15</b>	<b>100%</b>	<b>163.36</b>	<b>100%</b>	<b>171.46</b>	<b>100%</b>
<b>DAWASA WATER SOURCES</b>						
Source	Abstraction (Million m³)	% contribution to total abstraction	Abstraction (Million m³)	% contribution to total abstraction	Abstraction (Million m³)	% contribution to total abstraction
Lower Ruvu	66.03	68.5%	79.08	70.6%	93.70	57.8%
Upper Ruvu	26.34	27.3%	27.93	24.9%	64.17	39.6%
Mtoni	2.36	2.5%	3.11	2.8%	2.58	1.6%
Boreholes	1.69	1.8%	1.93	1.7%	1.54	1.0%
<b>TOTAL DAWASA</b>	<b>96.43</b>	<b>100%</b>	<b>112.05</b>	<b>100%</b>	<b>162.00</b>	<b>100%</b>

**Table A2.2: Water Demand, Water Production and Installed Water Production Capacity**

Name of Water Utility	Category	Water Demand (Million m³/year)			Annual Water Production(Million m³/year)			Installed Water Production Capacity (Million m³/year)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	36.43	37.41	38.42	14.60	15.82	15.70	24.45	21.04	21.04
DAWASA		195.24	195.24	207.97	123.70	152.79	146.44	177.26	177.26	177.61
Dodoma	A	16.79	16.79	16.79	14.11	14.23	15.45	22.45	22.45	22.45
Iringa	A	5.84	5.84	6.35	5.23	5.14	4.83	8.76	8.88	8.88
Kahama	A	4.96	5.96	6.20	3.74	4.76	4.08	9.49	9.49	9.49
Mbeya	A	17.52	17.83	21.90	15.06	15.56	16.12	18.78	18.78	18.78
Morogoro	A	16.63	21.63	21.63	10.87	11.44	11.28	12.41	12.41	12.41
Moshi	A	18.11	18.44	18.77	11.89	11.70	12.13	15.85	17.16	17.68
Mtwara	A	4.89	5.03	5.17	2.99	3.18	3.69	3.65	3.65	4.20
Musoma	A	9.01	6.57	6.76	4.02	6.48	6.84	4.25	13.14	13.14
Mwanza	A	39.42	40.15	40.95	29.50	27.83	28.88	39.42	39.42	39.42
Shinyanga	A	9.06	9.37	9.63	4.05	3.75	4.11	17.41	17.41	17.41
Songea	A	5.01	5.15	5.26	2.92	2.81	2.97	4.20	4.20	4.20
Tabora	A	9.87	10.44	10.74	5.36	4.17	5.28	11.68	11.68	11.68
Tanga	A	11.02	11.73	11.87	10.22	10.25	10.64	16.72	16.72	16.73
Subtotal Category A		399.80	408.30	428.42	258.24	289.91	288.41	386.77	393.68	395.11
Bukoba	B	4.62	4.59	4.78	2.80	2.58	2.75	6.57	6.57	6.57
Kigoma	B	7.77	8.05	8.28	2.56	2.42	3.07	5.48	5.48	6.57
Singida	B	3.98	4.03	4.31	2.56	2.41	2.58	4.96	3.28	3.50
Sumbawanga	B	4.74	4.73	4.83	2.70	2.96	2.55	0.54	7.48	7.48
Babati	C	2.74	2.83	2.97	2.18	2.15	2.25	4.36	4.63	5.62
Lindi	C	2.65	1.75	1.76	0.47	0.47	0.89	3.76	3.83	3.83
Bariadi	C	2.09	2.03	2.08	0.21	0.17	0.20	0.41	0.36	0.36
Geita	C	5.92	5.52	5.73	1.25	1.36	1.58	1.28	2.01	2.11
Mpanda	C	3.52	3.46	3.59	1.15	0.92	0.99	2.77	3.36	2.87
Njombe	C	4.15	3.25	2.44	1.46	1.12	1.27	2.03	2.03	2.05
Vwawa- Mlowo	C	-	3.30	3.49	-	0.86	0.62	-	2.02	2.02
Subtotal Category B&C		42.17	43.55	44.26	17.34	17.42	18.74	32.16	41.05	42.98
TOTAL		441.97	451.85	472.68	275.58	307.33	307.16	418.93	434.73	438.09

**Table A2.3 Length of Water Network, Pipe Breaks, Water Storage Capacity and Water Connections per Km Length of Network**

Name of Water Utilities	Category	Total Length of Water Network (km)>11/2"			No. of Pipe Breaks per km per year			Storage Capacity (hrs)			No. of Water Connections per Km Length of Network		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	440.1	506.7	558.9	7.6	5.8	3.6	3.3	3.2	3.1	114.5	104.3	102.0
DAWASA	A	2,884.5	2,969.0	3,220.0	0.0	0.7	22.0	6.3	6.3	5.4	59.4	91.0	81.1
Dodoma	A	456.0	486.8	533.2	3.9	82.6	40.9	47.2	47.2	47.2	79.7	79.1	82.2
Iringa	A	460.0	509.7	584.0	0.8	0.8	1.4	10.7	10.7	10.3	40.1	42.1	42.9
Kahama	A	273.8	294.0	327.1	3.0	7.2	13.3	33.2	33.2	26.2	47.9	51.7	53.9
Mbeya	A	749.0	754.1	767.1	1.7	2.0	2.0	11.7	11.7	9.3	66.8	67.3	85.2
Morogoro	A	362.7	374.2	425.7	21.7	2.2	33.4	5.4	5.4	4.2	78.8	79.6	73.9
Moshi	A	495.6	573.3	690.1	0.7	0.7	0.6	4.5	4.5	4.7	65.3	61.2	52.7
Mtwara	A	237.0	248.8	249.5	10.0	8.6	10.3	6.7	6.7	6.4	45.9	47.4	52.3
Musoma	A	152.2	269.0	280.9	4.9	3.6	2.5	9.5	9.5	12.6	86.1	79.2	54.3
Mwanza	A	746.5	763.9	788.8	14.1	13.7	1.4	8.2	8.2	7.9	82.5	90.4	103.1
Shinyanga	A	504.2	521.2	542.8	0.6	0.3	0.6	21.4	21.4	20.1	34.6	36.4	38.4
Songea	A	355.0	440.7	451.0	0.1	0.1	0.2	7.0	7.0	6.9	38.7	37.4	36.3
Tabora	A	300.0	322.0	357.4	1.6	1.4	2.1	5.2	5.2	4.8	54.4	56.2	55.1
Tanga	A	660.7	684.7	695.6	0.2	0.2	0.3	8.0	8.0	7.4	53.0	54.0	57.0
<b>Subtotal Category A</b>		<b>9,077.3</b>	<b>9,718.3</b>	<b>10,472.1</b>	<b>4.7</b>	<b>8.7</b>	<b>9.0</b>	<b>12.6</b>	<b>12.5</b>	<b>11.8</b>	<b>63.2</b>	<b>65.1</b>	<b>64.7</b>
Bukoba	B	126.6	128.9	139.9	0.9	1.7	1.2	10.6	10.6	10.3	69.0	72.3	75.6
Kigoma	B	239.0	291.0	295.0	2.8	2.4	3.6	4.7	4.7	14.3	39.5	40.9	37.3
Singida	B	296.9	303.0	314.0	0.7	0.9	2.1	16.7	16.7	15.4	31.8	32.6	39.1
Sumbawanga	B	138.0	138.0	300.0	1.1	1.6	0.5	15.4	15.4	15.1	46.5	51.5	29.6
Babati	C	222.8	260.6	305.4	5.1	6.0	4.2	4.2	4.2	4.2	38.1	28.5	29.0
Lindi	C	136.6	173.8	176.0	1.1	3.9	8.3	10.1	10.1	43.0	20.7	24.9	23.1
Bariadi	C	38.4	41.3	41.7	1.5	4.1	4.4	4.4	4.4	5.0	19.8	23.1	27.4
Geita	C	79.7	228.6	239.2	1.0	1.0	1.2	2.3	2.3	2.4	31.9	36.0	24.9
Mpanda	C	169.0	175.4	178.6	0.9	0.8	1.2	6.3	6.3	5.7	26.6	25.9	29.0
Njombe	C	139.9	142.6	145.1	0.1	1.0	1.5	2.2	2.2	3.8	39.3	44.3	50.0
Vwawa- Mlowo		-	127.3	127.3	-	0.0	0.0	-	2.5	#N/A	-	13.5	14.2
<b>Subtotal Category B&amp;C</b>		<b>1,586.8</b>	<b>2,010.4</b>	<b>2,262.2</b>	<b>15.2</b>	<b>23.4</b>	<b>28.2</b>	<b>77.0</b>	<b>77.0</b>	<b>#N/A</b>	<b>36.3</b>	<b>38.0</b>	<b>34.5</b>
<b>TOTAL/AVERAGE</b>		<b>10,664.2</b>	<b>11,728.7</b>	<b>12,734.2</b>	<b>3.4</b>	<b>5.9</b>	<b>6.3</b>	<b>8.8</b>	<b>8.8</b>	<b>8.3</b>	<b>52.4</b>	<b>52.7</b>	<b>51.9</b>

**Table A2.4: Non-revenue Water**

Name of Water Utilities	Category	NRW (%)			NRW (m <sup>3</sup> lost/km/day)			NRW (m <sup>3</sup> lost/connection/day)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	41.04	47.04	44.11	47.83	40.23	33.94	0.36	0.41	0.33
DAWASA		46.00	46.68	48.37	57.62	65.81	60.27	0.59	0.68	0.74
Dodoma	A	28.03	30.42	26.86	25.78	24.36	21.32	0.30	0.30	0.26
Iringa	A	28.79	31.23	25.64	10.13	8.63	5.81	0.21	0.20	0.14
Kahama	A	12.76	10.71	12.40	5.17	4.75	4.23	0.09	0.09	0.08
Mbeya	A	28.64	38.78	40.06	18.78	21.92	23.06	0.23	0.31	0.27
Morogoro	A	39.84	39.49	33.25	36.12	33.09	24.13	0.41	0.41	0.33
Moshi	A	23.09	21.69	20.36	14.56	12.13	9.81	0.25	0.21	0.19
Mtwara	A	29.96	28.42	24.53	11.97	9.96	9.93	21.83	21.83	0.19
Musoma	A	40.28	63.50	59.98	22.84	41.94	40.00	0.37	0.84	0.74
Mwanza	A	36.66	36.63	36.84	40.01	36.55	36.96	0.44	0.38	0.36
Shinyanga	A	20.13	16.70	13.25	3.30	3.29	2.75	0.12	0.09	0.07
Songea	A	21.70	21.04	20.33	22.02	3.67	3.67	0.13	0.11	0.10
Tabora	A	38.44	36.71	36.67	17.65	13.03	14.85	0.33	0.23	0.27
Tanga	A	24.09	25.74	28.07	12.08	10.55	11.76	0.19	0.19	0.21
<b>Average Category A</b>		<b>38.54</b>	<b>41.01</b>	<b>40.93</b>	<b>31.70</b>	<b>33.52</b>	<b>30.88</b>	<b>0.41</b>	<b>0.45</b>	<b>0.43</b>
Bukoba	B	45.81	49.51	52.55	33.55	27.17	28.28	0.38	0.36	0.37
Kigoma	B	28.59	28.00	28.12	8.50	3.52	8.02	0.20	0.10	0.21
Singida	B	36.70	26.54	28.16	7.45	5.78	6.33	0.27	0.16	0.16
Sumbawanga	B	30.97	30.98	43.21	13.59	18.19	10.05	0.32	0.33	0.34
Babati	C	48.16	43.69	38.56	12.69	9.87	7.78	0.45	0.34	0.27
Lindi	C	53.17	34.85	32.93	2.82	2.57	4.55	0.20	0.12	0.20
Bariadi	C	26.97	24.17	22.70	5.92	2.72	3.04	0.17	0.12	0.11
Geita	C	25.00	30.40	32.09	10.08	4.96	5.82	0.30	0.26	0.23
Mpanda	C	35.19	26.74	27.59	21.76	3.83	4.20	0.25	0.15	0.15
Njombe	C	35.30	28.24	30.29	27.87	6.09	7.26	0.40	0.13	0.15
Vwawa- Mlowo	C		34.70	34.72		6.40	4.62		0.47	0.32
<b>Average Category B&amp;C</b>		<b>36.79</b>	<b>32.17</b>	<b>35.89</b>	<b>10.90</b>	<b>7.75</b>	<b>8.35</b>	<b>2.00</b>	<b>0.22</b>	<b>0.24</b>
<b>AVERAGE</b>		<b>38.43</b>	<b>40.53</b>	<b>40.63</b>	<b>30.59</b>	<b>29.33</b>	<b>27.07</b>	<b>0.40</b>	<b>0.43</b>	<b>0.42</b>

**Table A2.5: Sewer Blockages, Length of Sewer Network, Number of Sewer Connections**

Name of Water Utilities	Category	Number of Sewer Blockages (Nr/km/year)			Length of Sewerage Network (Km)			Number of Sewer Connections / km (Connections / km)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	27.86	27.21	15.52	48.89	49.11	49.11	101.67	104.44	114.17
DAWASA	A	14.79	15.69	16.45	189.27	189.27	194.87	98.50	100.97	101.64
Dodoma	A	18.94	27.23	23.05	86.08	89.90	113.75	62.12	64.08	51.18
Iringa	A	27.90	21.12	23.97	48.00	55.67	61.90	39.37	38.44	35.19
Kahama	A	na	na	na	na	na	na	na	na	na
Mbeya	A	3.20	3.45	3.55	125.00	130.91	131.81	15.66	16.00	18.12
Morogoro	A	38.95	30.13	27.70	38.00	41.69	41.70	44.15	46.11	48.42
Moshi	A	25.73	18.38	23.55	62.30	67.70	66.96	45.29	44.96	43.13
Mtwara	A	na	na	na	na	na	na	na	na	na
Musoma	A	na	na	na	na	na	na	na	na	na
Mwanza	A	10.47	11.68	23.59	96.23	101.80	107.49	40.30	39.85	43.32
Shinyanga	A	na	na	na	na	na	na	na	na	na
Songea	A	12.93	10.36	14.05	37.27	37.27	37.00	33.84	35.36	38.35
Tabora	A	10.91	12.26	8.11	20.72	20.72	20.72	17.80	18.29	21.91
Tanga	A	27.54	19.83	19.15	35.66	35.66	35.92	75.32	77.65	78.09
<b>AVERAGE/TOTAL</b>		<b>19.93</b>	<b>17.94</b>	<b>18.06</b>	<b>787.42</b>	<b>819.71</b>	<b>861.23</b>	<b>52.18</b>	<b>53.29</b>	<b>53.96</b>
Bukoba	B	na	na	na	na	na	na	na	na	na
Kigoma	B	na	na	na	na	na	na	na	na	na
Singida	B	na	na	na	na	na	na	na	na	na
Sumbawanga	B	na	na	na	na	na	na	na	na	na
Babati	C	na	na	na	na	na	na	na	na	na
Lindi	C	na	na	na	na	na	na	na	na	na
Bariadi	C	na	na	na	na	na	na	na	na	na
Geita	C	na	na	na	na	na	na	na	na	na
Mpanda	C	na	na	na	na	na	na	na	na	na
Njombe	C	na	na	na	na	na	na	na	na	na
Vvawa-Mlowo	C	na	na	na	na	na	na	na	na	na
<b>Average Category B&amp;C</b>		-	-	-	-	-	-	-	-	-
<b>AVERAGE</b>		<b>19.93</b>	<b>17.94</b>	<b>18.06</b>	<b>787.42</b>	<b>819.71</b>	<b>861.23</b>	<b>52.18</b>	<b>53.29</b>	<b>53.96</b>

**Table A2.6 (a) Water Quality Compliance**

Utility	Category	2016/17					2017/18					2018/19				
		E-coli	Turbidity	Residual Chlorine	pH	Average	E-coli	Turbidity	Residual Chlorine	pH	Average	E-coli	Turbidity	Residual Chlorine	pH	Average
		% Compliance					% Compliance					% Compliance				
Arusha	A	100	97	98	100	99	100	100	100	100	100	100	100	99	100	100
DAWASA		100	100	100	100	100	100	100	99	100	100	100	100	100	100	100
Dodoma	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Iringa	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Kahama	A	100	100	100	100	100	100	100	89	100	97	100	100	2	100	76
Mbeya	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Morogoro	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Moshi	A	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100
Mtwara	A	100	100	100	100	100	93	90	100	100	96	96	85	100	100	95
Musoma	A	93	93	90	92	92	95	95	97	92	95	94	100	97	98	97
Mwanza	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shinyanga	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Songea	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Tabora	A	100	97	100	100	99	100	72	100	100	93	100	97	100	100	99
Tanga	A	100	99	99	100	100	100	100	100	100	100	100	100	100	100	100
<b>Average Category A</b>		<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>97</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>93</b>	<b>100</b>	<b>98</b>
Bukoba	B	97	100	97	99	98	91	100	100	100	98	91	97	97	99	96
Kigoma	B	100	100	100	100	100	100	100	96	100	99	100	100	100	100	100
Singida	B	0	0	0	0	0	100	100	100	100	100	100	100	100	100	100
Sumbawanga	B	88	87	88	100	91	100	94	93	100	97	99	96	99	100	99
Babati	C	100	100	94	100	99	100	100	100	100	100	100	100	66	100	92
Lindi	C	50	100	nc	100	83	83	100	98	100	95	100	95	100	100	99
Bariadi	C	100	100	56	100	89	100	100	60	100	90	100	100	100	100	100
Geita	C	100	100	74	100	94	100	100	45	100	86	100	98	59	98	89
Mpanda	C	77	53	82	48	65	100	100	20	50	68	100	100	100	100	100
Njombe	C	100	87	91	88	92	67	74	91	89	80	80	84	90	90	86
Vwawa- Mlowo	C						100	100	100	71	93	74	50	57	80	65
<b>Average Category B and C</b>		<b>81</b>	<b>83</b>	<b>76</b>	<b>83</b>	<b>81</b>	<b>95</b>	<b>97</b>	<b>82</b>	<b>92</b>	<b>91</b>	<b>95</b>	<b>93</b>	<b>88</b>	<b>97</b>	<b>93</b>
<b>OVERALL AVG.</b>		<b>92</b>	<b>93</b>	<b>90</b>	<b>93</b>	<b>92</b>	<b>97</b>	<b>97</b>	<b>91</b>	<b>97</b>	<b>96</b>	<b>98</b>	<b>98</b>	<b>92</b>	<b>99</b>	<b>97</b>

**Table A2.6 (b) Comparison between Regional WSSAs and EWURA Water Quality Results**

Name of Water Utility	Category	WSSAs' Test Results					EWURA Test Results				
		E-coli	Turbidity	Residual Chlorine	pH	Average	E-Coli	Turbidity	Residual Chlorine	pH	Average
Arusha	A	100	100	99	100	100	100	100	67	100	92
DAWASA		100	99	100	100	100	98	100	48	78	81
Dodoma	A	100	100	100	100	100	100	100	53	87	85
Iringa	A	100	100	100	100	100	100	100	93	20	78
Kahama	A	100	100	2	100	76	100	100	0	100	75
Mbeya	A	100	100	100	100	100	100	100	100	100	100
Morogoro	A	100	100	100	100	100	100	40	100	100	85
Moshi	A	100	100	100	100	100	100	100	93	73	92
Mtwara	A	96	85	100	100	95	100	93	7	100	75
Musoma	A	94	100	97	98	97	100	85	8	100	73
Mwanza	A	100	100	100	100	100	100	100	55	100	89
Shinyanga	A	100	100	100	100	100	100	100	0	93	73
Songea	A	100	100	100	100	100	85	100	54	100	85
Tabora	A	100	97	100	100	99	100	100	87	87	94
Tanga	A	100	100	100	100	100	100	87	53	80	80
<b>Average Category A</b>		<b>99</b>	<b>99</b>	<b>93</b>	<b>100</b>	<b>98</b>	<b>99</b>	<b>94</b>	<b>55</b>	<b>88</b>	<b>84</b>
Bukoba	B	91	97	97	99	96	100	100	54	100	89
Kigoma	B	100	100	100	100	100	100	100	10	100	78
Singida	B	100	100	100	100	100	100	100	93	93	97
Sumbawanga	B	99	96	99	100	99	80	100	13	0	48
Babati	C	100	100	66	100	92	87	100	67	100	89
Lindi	C	100	95	100	100	99	75	33	8	100	54
Bariadi	C	100	100	100	100	100	100	100	0	100	75
Geita	C	100	98	59	98	89	100	100	40	100	85
Mpanda	C	100	100	100	100	100	85	100	54	0	60
Njombe	C	80	84	90	90	86	100	91	73	55	80
Vwawa- Mlowo	C	74	50	57	80	65	23	38	23	62	37
<b>Average Category B and C</b>		<b>95</b>	<b>93</b>	<b>88</b>	<b>97</b>	<b>93</b>	<b>86</b>	<b>87</b>	<b>40</b>	<b>74</b>	<b>72</b>
<b>OVERALL AVERAGE</b>		<b>97</b>	<b>96</b>	<b>91</b>	<b>99</b>	<b>96</b>	<b>93</b>	<b>91</b>	<b>47</b>	<b>81</b>	<b>78</b>

**Table A2.7 Waste Water Effluent Quality Compliance**

Name of Water Utility	Category	Compliance with BOD <sub>5</sub> Standards (%)			Compliance with COD Standards (%)		
		2016/17	2017/2018	2018/19	2016/17	2017/2018	2018/19
Arusha	A	0	0	0	0	0	0
DAWASA		36	45	37	25	45	11
Dodoma	A	100	-	15	100	-	0
Iringa	A	0	50	50	100	50	50
Kahama	A	na	na	na	na	na	na
Mbeya	A	100	100	100	100	100	100
Morogoro	A	38	100	90	40	100	100
Moshi	A	25	84	100	25	85	100
Mtwara	A	na	na	na	na	na	na
Musoma	A	na	na	na	na	na	na
Mwanza	A	100	100	100	100	100	100
Shinyanga	A	na	na	na	na	na	na
Songea	A	100	100	100	100	100	100
Tabora	A	na	na	na	na	na	na
Tanga	A	na	na	na	na	na	na
<b>Average Category A</b>		<b>55</b>	<b>72</b>	<b>66</b>	<b>66</b>	<b>73</b>	<b>62</b>
Bukoba	B	na	na	na	na	na	na
Kigoma	B	na	na	na	na	na	na
Singida	B	na	na	na	na	na	na
Sumbawanga	B	na	na	na	na	na	na
Babati	C	na	na	na	na	na	na
Lindi	C	na	na	na	na	na	na
Bariadi	C	na	na	na	na	na	na
Geita	C	na	na	na	na	na	na
Mpanda	C	na	na	na	na	na	na
Njombe	C	na	na	na	na	na	na
Vwawa- Mlowo	C	na	na	na	na	na	na
<b>Average Category B and C</b>		<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
<b>OVERALL AVERAGE</b>		<b>55</b>	<b>72</b>	<b>66</b>	<b>66</b>	<b>73</b>	<b>62</b>

**Table A2.8 Total Water Connections, Domestic Connections and Public Water Kiosks**

Name of Water Utilities	Category	Total Water Connections (Number)			Domestic Water Connections (Number)			Public Water Kiosks (Number)			
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	Working Kiosks
Arusha	A	45,902	49,902	57,015	39,833	43,633	50,505	275	302	372	289
DAWASA		262,476	286,115	261,294	256,290	211,043	254,018	371	389	510	431
Dodoma	A	36,084	39,205	43,837	33,378	36,672	40,240	546	348	304	304
Iringa	A	19,355	22,080	25,058	18,226	20,895	23,800	99	109	128	128
Kahama	A	14,157	15,773	17,622	13,114	14,668	16,366	43	66	83	83
Mbeya	A	50,403	53,089	65,389	49,230	51,903	62,895	63	63	88	88
Morogoro	A	28,880	30,127	31,476	27,117	28,306	29,630	166	174	177	67
Moshi	A	30,324	33,744	36,379	27,973	31,273	33,844	187	188	184	156
Mtwara	A	11,228	12,405	13,057	10,454	11,486	12,092	47	137	108	108
Musoma	A	12,050	13,416	15,251	11,249	12,442	14,240	19	24	13	13
Mwanza	A	67,465	74,313	81,310	62,465	68,747	74,853	166	177	185	357
Shinyanga	A	18,343	19,379	20,851	17,152	18,106	19,536	200	219	229	229
Songea	A	13,289	14,775	16,373	12,433	13,843	15,429	25	31	30	30
Tabora	A	16,851	18,328	19,691	15,784	17,221	18,556	161	171	183	94
Tanga	A	35,694	37,608	39,646	33,785	35,635	37,651	286	288	290	212
<b>Total Category A</b>		<b>662,501</b>	<b>720,259</b>	<b>744,249</b>	<b>628,483</b>	<b>615,873</b>	<b>703,655</b>	<b>2,654</b>	<b>2,686</b>	<b>2,884</b>	<b>2,589</b>
Bukoba	B	9,147	9,678	10,580	8,463	8,978	9,622	43	45	45	40
Kigoma	B	9,787	10,483	11,002	9,140	9,676	10,314	16	14	15	14
Singida	B	9,671	11,044	12,268	8,706	9,619	0	91	97	101	0
Sumbawanga	B	7,105	7,683	8,871	6,542	7,100	8,238	71	69	106	102
Babati	C	6,357	7,546	8,859	5,850	7,004	8,259	107	110	123	105
Lindi	C	3,404	3,663	4,059	3,019	3,151	3,523	135	154	206	161
Bariadi	C	888	945	1,141	753	811	976	17	19	15	15
Geita	C	2,873	4,384	5,961	2,609	4,184	5,577	9	12	13	11
Mpanda	C	4,384	4,620	5,176	4,080	4,358	4,865	34	44	48	48
Njombe	C	6,203	6,735	7,255	5,982	6,513	7,027	2	0	0	0
Vwawa- Mlowo	C		1,716	1,814		1,617	1,711		6	6	6
<b>Total Category B and C</b>		<b>59,819</b>	<b>68,497</b>	<b>76,986</b>	<b>55,144</b>	<b>63,011</b>	<b>60,112</b>	<b>525</b>	<b>570</b>	<b>678</b>	<b>502</b>
<b>TOTAL</b>		<b>722,320</b>	<b>788,756</b>	<b>821,235</b>	<b>683,627</b>	<b>678,884</b>	<b>763,767</b>	<b>3,179</b>	<b>3,256</b>	<b>3,562</b>	<b>3,091</b>

**Table A2.9 Metering Ratio and Composition of Metered Customers**

Name of Water Utilities	Category	Metering Ratio (%)			Composition of Metered Customers				
		2016/17	2017/18	2018/19	Domestic	Institutional	Commercial	Industrial	Kiosk
Arusha	A	100	100	100	43,684	493	3,674	406	289
DAWASA		94	95.0	96	244,108	2,228	3,121	342	414
Dodoma	A	100	100	100	40,240	1,284	2,009	-	304
Iringa	A	100	100	100	23,800	610	440	80	128
Kahama	A	100	100	100	16,366	298	765	51	83
Mbeya	A	100	100	100	62,895	822	1,572	12	88
Morogoro	A	100	100	100	25,820	552	663	51	86
Moshi	A	100	100	100	32,741	524	1,478	25	156
Mtwara	A	100	100	100	12,092	371	503	27	64
Musoma	A	100	81	96	10,846	305	639	24	13
Mwanza	A	100	100	100	72,665	1,534	2,919	355	182
Shinyanga	A	100	100	100	19,312	505	177	74	216
Songea	A	100	98	99	15,226	356	558	-	30
Tabora	A	100	100	100	18,556	446	454	52	183
Tanga	A	100	100	100	32,803	345	688	151	212
<b>Average/Total Category A</b>		<b>97.9</b>	<b>97.4</b>	<b>99.9</b>	<b>671,154</b>	<b>10,673</b>	<b>19,660</b>	<b>1,650</b>	<b>2,448</b>
Bukoba	B	100	94	95	8602	232	331	10	40
Kigoma	B	100.0	97	99	7314	187	267	19	14
Singida	B	100	100.0	100	11233.0	344.0	562.0	30.0	101.0
Sumbawanga	B	83.1	80.2	88.9	7452.0	218.0	192.0	1.0	24.0
Babati	C	100	100	1	7687	222	158	6	105
Lindi	C	90.3	91.5	100	3092	214	152	5	160
Bariadi	C	74.6	69.3	80	970.0	66.0	84.0	0.0	15.0
Geita	C	87.3	91.6	100.0	5577.0	154.0	207.0	10.0	13.0
Mpanda	C	74.1	85.0	86.0	4865.0	142.0	116.0	0.0	48.0
Njombe	C	82.1	81.1	86.0	5988.0	118.0	110.0	0.0	0.0
Vwawa- Mlowo	C		25.6	29.5	485	28	10	7	6
<b>Average/Total Category B and C</b>		<b>92.3</b>	<b>95.5</b>	<b>98.1</b>	<b>63,265</b>	<b>1,925</b>	<b>2,189</b>	<b>88</b>	<b>526</b>
<b>OVERALL AVERAGE/TOTAL</b>		<b>97.4</b>	<b>97.2</b>	<b>99.8</b>	<b>734,419</b>	<b>12,598</b>	<b>21,849</b>	<b>1,738</b>	<b>2,974</b>

**Table A2.10: Proportion of Population Living in Area with water Network and Proportion of Population Directly Served with Water**

Name of Water Utilities	Category	Proportion of Population Living in the area with water network (%)			Proportion of Population Directly Served with water (%)				Average No. of People served per Domestic Connection (No)	Average No. of People Served per Kiosk (No)	Boarding Institutional Population (No)	Population Directly served (No)
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	Total Population				
Arusha	A	81	74	72	78	54	51	637,494	6	50		292,228
DAWASA		75	85	85	68	75	76	6,553,952	19	250		4,934,092
Dodoma	A	82	80	82	72	72	78	500,000	8	220	34,594	423,394
Iringa	A	96	98	98	93	95	95	178,329	6	60	11,547	169,167
Kahama	A	79	80	80	50	50	77	176,653	5	370		112,540
Mbeya	A	97	94	80	96	93	79	556,000	6	80	40,020	424,430
Morogoro	A	90	90	81	71	81	77	397,408	7	175		219,135
Moshi	A	100	100	100	98	98	98	347,215	8	120	49,752	339,224
Mtwara	A	90	90	85	65	82	77	127,815	7	250		111,644
Musoma	A	76	88	88	74	77	81	176,130	10	300		146,300
Mwanza	A	92	92	95	93	89	89	1,109,361	12	250		987,486
Shinyanga	A	60	60	83	52	48	57	190,535	6	100		140,116
Songea	A	80	89	93.8	80	83	91.1	197,961.00	12	42		186,408
Tabora	A	81	79	92	75	78	84	276,523	10	250	23,219	232,279
Tanga	A	95	98	97	95	97	91	309,252	7	40	9,106	281,143
<b>Total Category A</b>		<b>80.3</b>	<b>85.9</b>	<b>85.9</b>	<b>73.9</b>	<b>78.1</b>	<b>79.9</b>	<b>11,734,628</b>	<b>9</b>	<b>170</b>	<b>168,238</b>	<b>8,999,586</b>
Bukoba	B	80	85	85	53	59	59	162,500	9	250		96,598
Kigoma	B	72	73	76	72	62	75	244,006	16	250		168,524
Singida	B	73	74	80	69	74	80	111,005	12	100	9,040	9,040
Sumbawanga	B	76	76	78	62	64	78	157,016	7	250	8,542	91,708
Babati	C	66	87	81	59	67	79	116,077	13	60	2,300	115,967
Lindi	C	63	75	76	53	69	69	91,968	7	250		64,911
Bariadi	C	46	46	46	46	21	22	65,016	15	150		16,890
Geita	C	57	59	59	7	32	55	235,315	14	250		80,828
Mpanda	C	61	70	75	49	50	49	143,112	6	250		41,190
Njombe	C	69	87	88	53	53	64	68,568	6	200	3,511	45,673
Vwawa- Mlowo	C		43	43		38	39	113,785	15	250	4,284	31,449
<b>Total Category B&amp;C</b>		<b>67.6</b>	<b>72.8</b>	<b>74.2</b>	<b>50.2</b>	<b>60.6</b>	<b>57.9</b>	<b>1,508,368</b>	<b>10.9</b>	<b>205</b>	<b>27677</b>	<b>762,778</b>
<b>TOTAL/AVERAGE</b>		<b>78.9</b>	<b>84.4</b>	<b>84.7</b>	<b>70.9</b>	<b>69.3</b>	<b>68.9</b>	<b>13,242,996</b>	<b>10.7</b>	<b>202.8</b>	<b>195915</b>	<b>9,762,364</b>

**Table A2.11: Number of Sewerage Connections and Proportion of Population Connected to Sewerage Network**

Name of Water Utilities	Category	Total Sewerage Connection (Number)				Domestic Sewerage Connections (Number)				Proportion of Population Connected to Sewerage Network (%)			
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	5,106	5,487	5,607	4,010	4,447	4,528	8	8	8	8	8	8
DAWASA	A	19,111	20,803	19,806	17,089	18,781	19,806	3	3	10	10	12	12
Dodoma	A	5,516	5,659	5,822	4,903	5,000	5,109	14	14	20	20	20	20
Iringa	A	1,845	2,027	2,178	1,605	1,756	1,897	16	16	18	18	18	18
Kahama	A	na	na	na	na	na	na	na	na	na	na	na	na
Mbeya	A	2,000	2,213	2,389	1,825	2,027	2,203	14	14	14	14	12	12
Morogoro	A	1,752	1,882	2,019	1,441	1,563	1,691	5	5	5	5	6	6
Moshi	A	2,801	2,866	2,888	2,010	2,065	2,079	28	28	31	31	28	28
Mtwara	A	na	na	na	na	na	na	na	na	na	na	na	na
Musoma	A	na	na	na	na	na	na	na	na	na	na	na	na
Mwanza	A	3,835	4,143	4,657	3,035	3,277	3,702	23	23	23	23	23	23
Shinyanga	A	na	na	na	na	na	na	na	na	na	na	na	na
Songea	A	1,318	1,373	1,419	1,099	1,151	1,198	7	7	7	7	7	7
Tabora	A	379	421	454	294	331	362	6	6	6	6	7	7
Tanga	A	2,769	2,789	2,805	2,503	2,507	2,520	10	10	10	10	7	7
<b>TOTAL/AVERAGE</b>		<b>46,432</b>	<b>49,663</b>	<b>50,044</b>	<b>39,814</b>	<b>42,905</b>	<b>45,095</b>	<b>7.5</b>	<b>12.1</b>	<b>13.4</b>	<b>12</b>	<b>13</b>	<b>13</b>
Bukoba	B	na	na	na	na	na	na	na	na	na	na	na	na
Kigoma	B	na	na	na	na	na	na	na	na	na	na	na	na
Singida	B	na	na	na	na	na	na	na	na	na	na	na	na
Sumbawanga	B	na	na	na	na	na	na	na	na	na	na	na	na
Babati	C	na	na	na	na	na	na	na	na	na	na	na	na
Lindi	C	na	na	na	na	na	na	na	na	na	na	na	na
Baradi	C	na	na	na	na	na	na	na	na	na	na	na	na
Geita	C	na	na	na	na	na	na	na	na	na	na	na	na
Mpanda	C	na	na	na	na	na	na	na	na	na	na	na	na
Njombe	C	na	na	na	na	na	na	na	na	na	na	na	na
Vwawa- Mlowo	C	na	na	na	na	na	na	na	na	na	na	na	na
<b>Average Category B&amp;C</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>AVERAGE</b>		<b>46,432</b>	<b>49,663</b>	<b>50,044</b>	<b>39,814</b>	<b>42,905</b>	<b>45,095</b>	<b>8</b>	<b>12</b>	<b>13</b>	<b>12</b>	<b>13</b>	<b>13</b>

**Table A2.12: Average Hours of Service and Proportion of Connection with 24 Hours of Service**

Name of Water Utilities	Category	Average Hours of Service			Proportion of Population with 24 Hours of Service (%)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	11	15	15.0	23	22	19.0
DAWASA		19	22	21.8	0	57	50.0
Dodoma	A	23	23	22.4	26	37	32.0
Iringa	A	24	24	24.0	0	98	98.0
Kahama		22	23	23.0	90	90	90.0
Mbeya	A	23	23	18.0	78	77	70.0
Morogoro	A	6	12	12.0	0	1	1.0
Moshi	A	24	24	23.9	89	100	100.0
Mtwara	A	10	15	15.6	26	46	31.4
Musoma	A	18	22	22.0	85	96	96.0
Mwanza	A	22	22	22.0	90	90	92.0
Shinyanga	A	24	24	23.0	56	56	38.3
Songea	A	24	24	23.0	87	91	78.0
Tabora	A	16	17	18.7	0	1	1.5
Tanga	A	23	23	23.6	95	95	97.5
<b>Average Category A</b>		<b>19</b>	<b>21</b>	<b>20.5</b>	<b>50</b>	<b>64</b>	<b>59.6</b>
Bukoba	B	22	22	22.0	66	66	66.0
Kigoma	B	14	15	17.0	12	12	21.0
Singida	B	13	16	16.0	20	51	50.7
Sumbawanga	B	20	20	20.4	13	10	9.1
Babati	C	18	17	18.9	0	50	7.2
Lindi	C	4	3	11.6	9	0	0
Bariadi	C	12	12	12.0	1	0	0.0
Geita	C	14	5	12.0	64	76	76.0
Mpanda	C	4	6	6.0	30	15	15.0
Njombe	C	15	16	16.0	30	25	30.0
Vwawa- Mlowo	C	-	6	6.8	-	2	1.7
<b>Average Category B&amp;C</b>		<b>14</b>	<b>13</b>	<b>14.4</b>	<b>24</b>	<b>28</b>	<b>27.7</b>
<b>OVERALL AVERAGE</b>		<b>17</b>	<b>18</b>	<b>18.4</b>	<b>40</b>	<b>50</b>	<b>48.7</b>

**Table A2.13: Revenue Collection Efficiency, Accounts Receivables and Overall Efficiency Indicator**

Name of Water Utilities	Category	Revenue Collection Efficiency (%)			Accounts Receivables			Overall Efficiency Indicator (OEI) %		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	92.4	100.8	111.7	3.8	3.6	2.4	54.5	53.0	99.6
DAWASA	A	78.6	81.3	91.0	4.3	5.9	4.9	42.5	44.4	47.0
Dodoma	A	93.2	78.0	115.4	2.8	4.4	3.9	67.1	55.8	73.4
Iringa	A	95.4	96.0	96.5	2.4	1.4	1.1	67.9	69.9	71.8
Kahama	A	97.0	106.8	97.2	3.9	2.2	2.1	84.6	89.3	85.1
Mbeya	A	88.0	99.3	90.0	5.8	5.8	4.1	62.8	60.8	53.9
Morogoro	A	102.1	97.2	101.0	1.8	2.4	2.3	60.2	58.8	66.8
Moshi	A	96.7	98.6	95.9	4.0	5.4	5.4	74.4	76.9	95.7
Mtwara	A	97.2	89.6	98.7	6.0	4.9	2.6	68.1	64.2	74.5
Musoma	A	100.9	90.0	93.7	4.3	6.4	6.9	59.7	32.8	37.5
Mwanza	A	99.4	104.6	103.9	2.2	2.3	2.0	62.9	63.4	55.2
Shinyanga	A	101.7	90.6	95.1	3.2	3.4	3.4	79.9	75.2	82.5
Songea	A	81.0	88.5	98.0	4.1	3.7	4.1	63.4	69.9	78.4
Tabora	A	86.0	90.8	109.9	8.8	5.8	3.6	52.9	58.3	63.5
Tanga	A	91.9	95.4	101.3	4.1	5.0	4.0	69.8	70.9	71.9
<b>Average Category A</b>		<b>93.4</b>	<b>93.8</b>	<b>99.9</b>	<b>4.1</b>	<b>4.2</b>	<b>3.5</b>	<b>64.7</b>	<b>62.9</b>	<b>70.5</b>
Bukoba	B	113.1	108.6	84.2	4.6	5.4	2.8	49.4	39.6	46.6
Kigoma	B	92.0	90.9	113.9	9.8	7.7	10.9	65.7	65.4	71.9
Singida	B	69.0	97.2	97.2	2.5	2.7	2.5	43.7	71.4	96.9
Sumbawanga	B	73.1	96.4	97.0	3.5	3.7	4.7	50.5	66.5	55.3
Babati	C	89.1	95.2	87.9	2.0	1.9	1.1	46.2	53.6	54.0
Lindi	C	97.0	102.0	63.6	11.2	9.8	5.8	45.4	65.7	42.6
Bariadi	C	80.0	86.9	75.5	5.5	5.1	3.8	58.4	65.9	58.4
Geita	C	61.4	74.7	88.5	0.6	2.5	1.3	46.1	56.2	60.1
Mpanda	C	83.0	77.5	89.9	0.8	1.2	1.6	53.8	57.9	65.6
Njombe	C	90.0	89.7	99.8	1.6	2.3	2.2	58.2	64.3	70.6
Vwawa-Mlowo	-	-	88.2	98.0	-	1.8	4.3	-	57.6	64.0
<b>Average Category B&amp;C</b>		<b>84.8</b>	<b>91.6</b>	<b>90.5</b>	<b>4.2</b>	<b>4.0</b>	<b>3.7</b>	<b>51.7</b>	<b>60.4</b>	<b>62.4</b>
<b>OVERALL AVERAGE</b>		<b>90.0</b>	<b>93.1</b>	<b>95.9</b>	<b>4.1</b>	<b>4.2</b>	<b>3.6</b>	<b>59.5</b>	<b>62.0</b>	<b>67.1</b>

**Table A2.14: Billing Composition and Domestic Billing**

Name of Water Utilities	Category	Water Billing (Millions TZS)				Sewerage Billing (Millions TZS)				Other Operational Billing (Million TZS)				Domestic Billing (Million TZS)			
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17
Arusha	A	10,225.4	9,914.8	12,234.2	838.7	1,045.2	1,038.1	2,337.0	2,414.5	2,453.1	3,334.6	6,747.7	7,420.0	8,232.2	8,232.2	8,232.2	8,232.2
DAWASA	A	60,166.2	87,539.3	104,543.5	12,036.5	7,495.0	11,571.2	1,576.8	7,445.1	20,659.4	33,940.9	34,088.7	71,700.1	82,729.6	82,729.6	82,729.6	82,729.6
Dodoma	A	12,790.7	12,487.6	13,752.9	951.6	1,322.6	1,175.1	2,021.1	2,409.9	3,314.6	4,562.3	8,227.4	8,794.4	7,883.1	7,883.1	7,883.1	7,883.1
Iringa	A	5,845.1	7,058.3	7,124.4	725.2	776.0	536.4	138.2	549.7	310.6	2,121.7	3,874.1	5,504.4	5,080.2	5,080.2	5,080.2	5,080.2
Kahama	A	4,278.0	6,034.7	6,095.7	-	-	-	422.3	381.5	381.5	809.6	2,529.9	2,615.2	2,922.6	2,922.6	2,922.6	2,922.6
Mbeya	A	7,989.2	7,575.6	10,308.3	686.6	1,313.0	859.0	2,002.1	1,491.6	2,065.9	2,561.7	6,876.0	6,971.8	6,994.1	6,994.1	6,994.1	6,994.1
Morogoro	A	7,263.4	7,398.6	8,794.7	281.3	296.8	309.2	902.0	1,323.9	1,015.9	3,518.6	5,596.8	5,892.3	5,898.8	5,898.8	5,898.8	5,898.8
Moshi	A	6,479.2	7,126.1	7,408.0	762.7	900.2	1,005.6	1,508.9	1,575.3	1,382.1	2,084.1	4,764.0	5,573.2	5,483.8	5,483.8	5,483.8	5,483.8
Mtwara	A	2,861.6	3,066.2	2,911.3	-	-	-	548.5	679.2	433.6	690.5	1,803.8	1,752.8	1,897.4	1,897.4	1,897.4	1,897.4
Musoma	A	3,091.8	2,948.9	3,093.9	-	-	-	180.9	128.2	70.5	999.8	1,839.5	2,859.0	2,911.3	2,911.3	2,911.3	2,911.3
Mwanza	A	19,600.4	18,571.1	19,033.5	1,223.0	1,146.1	1,196.9	2,073.0	2,258.5	4,172.8	6,668.8	10,815.5	11,419.7	11,391.3	11,391.3	11,391.3	11,391.3
Shinyanga	A	4,363.8	4,435.7	5,542.7	-	-	-	834.5	925.9	808.1	1,790.5	3,057.5	3,218.3	3,707.8	3,707.8	3,707.8	3,707.8
Songea	A	2,013.4	2,508.1	2,457.0	230.7	264.0	137.0	728.2	914.8	1,054.2	758.4	1,919.9	2,003.1	1,870.8	1,870.8	1,870.8	1,870.8
Tabora	A	4,538.9	3,809.6	4,642.5	83.7	57.0	93.7	808.3	620.5	1,056.5	1,035.7	2,346.3	1,774.4	2,367.5	2,367.5	2,367.5	2,367.5
Tanga	A	10,377.4	10,786.2	12,890.9	280.0	273.1	289.8	1,271.7	1,301.2	653.6	3,800.2	8,163.8	8,541.1	9,508.8	9,508.8	9,508.8	9,508.8
<b>Subtotal Category A</b>		<b>161,884.5</b>	<b>191,261.0</b>	<b>220,833.6</b>	<b>18,099.9</b>	<b>14,889.0</b>	<b>18,212.1</b>	<b>17,353.3</b>	<b>24,419.9</b>	<b>39,832.2</b>	<b>68,677.3</b>	<b>102,650.9</b>	<b>146,039.7</b>	<b>158,879.4</b>	<b>158,879.4</b>	<b>158,879.4</b>	<b>158,879.4</b>
Bukoba	B	1,762.2	1,778.7	2,279.2	-	-	-	447.2	610.6	437.3	664.5	1,411.6	1,405.9	1,663.3	1,663.3	1,663.3	1,663.3
Kigoma	B	1,728.7	1,441.5	1,540.6	-	-	-	63.6	102.7	260.2	1,002.5	517.3	913.5	956.2	956.2	956.2	956.2
Singida	B	2,214.4	2,078.3	2,907.9	-	-	-	281.1	468.7	189.9	329.2	1,502.7	1,363.3	1,949.2	1,949.2	1,949.2	1,949.2
Sumbawanga	B	977.6	1,128.0	1,164.7	-	-	-	368.6	488.3	370.9	440.6	951.0	1,104.1	1,094.7	1,094.7	1,094.7	1,094.7
Babati	C	1,597.6	1,709.0	1,995.9	-	-	-	238.4	379.6	479.1	302.8	1,145.9	1,072.4	1,473.8	1,473.8	1,473.8	1,473.8
Lindi	C	284.2	442.5	737.0	-	-	-	75.7	132.5	408.9	106.8	190.5	269.9	361.1	361.1	361.1	361.1
Bariadi	C	120.8	107.9	142.5	-	-	-	63.0	54.4	84.6	32.4	81.5	85.0	142.5	142.5	142.5	142.5
Geita	C	301.6	365.4	689.7	-	20.2	72.8	110.6	223.2	275.4	41.1	0.6	385.3	482.4	482.4	482.4	482.4
Mpanda	C	459.4	481.4	746.8	-	-	-	60.3	116.1	28.3	176.2	409.8	601.0	441.4	441.4	441.4	441.4
Njombe	C	937.0	850.3	883.7	-	-	-	81.1	74.1	51.9	263.5	730.5	750.8	749.0	749.0	749.0	749.0
Vwawa-Mlowo		-	63.7	91.2	-	-	-	-	4.8	4.4	-	-	36.1	83.1	83.1	83.1	83.1
<b>Subtotal Category B&amp;C</b>		<b>10,383.5</b>	<b>10,446.7</b>	<b>13,179.1</b>	<b>-</b>	<b>20.2</b>	<b>72.8</b>	<b>1,789.6</b>	<b>2,655.0</b>	<b>2,590.8</b>	<b>3,359.7</b>	<b>6,941.5</b>	<b>7,987.2</b>	<b>9,396.7</b>	<b>9,396.7</b>	<b>9,396.7</b>	<b>9,396.7</b>
<b>TOTAL</b>		<b>172,268.0</b>	<b>201,707.7</b>	<b>234,012.7</b>	<b>18,099.9</b>	<b>14,909.2</b>	<b>18,284.8</b>	<b>19,142.9</b>	<b>27,074.9</b>	<b>42,423.0</b>	<b>38,096.1</b>	<b>109,592.4</b>	<b>154,026.9</b>	<b>168,276.1</b>	<b>168,276.1</b>	<b>168,276.1</b>	<b>168,276.1</b>

**Table A2.15: Cost Structure: Total O&M, Production & Maintenance and Admin. Costs**

Utilities	Category	Total O & M Costs (Millions TZS)			Production, Distribution and Maintenance (Millions TZS)			Administration Costs (Millions TZS)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	9,504.6	11,124.7	12,771.0	3,659.6	4,014.9	5,352.6	1,408.1	1,667.0	1,804.2
DAWASA	A	103,330.2	84,908.5	113,837.4	17,382.7	42,435.5	55,808.9	41,290.2	16,913.7	18,360.9
Dodoma	A	12,816.1	13,007.8	14,857.7	6,959.8	7,042.3	8,305.8	1,479.0	1,917.5	1,863.4
Iringa	A	4,985.5	5,497.0	5,736.9	2,065.4	1,900.8	1,912.2	1,023.5	1,291.7	1,343.9
Kahama	A	4,597.2	5,690.1	5,899.7	2,731.5	3,442.9	3,493.9	614.2	985.6	1,061.8
Mbeya	A	8,551.4	10,292.0	12,609.1	3,052.6	3,725.8	4,333.4	1,588.7	2,362.2	2,334.5
Morogoro	A	7,944.2	8,707.2	9,834.7	3,152.6	4,073.8	3,257.5	1,417.1	1,612.9	1,736.3
Moshi	A	7,173.2	7,622.4	7,684.4	1,571.9	1,823.5	1,629.9	1,751.1	1,999.1	2,413.0
Mtwara	A	2,684.6	3,004.1	3,095.8	1,181.5	1,300.2	1,274.1	547.3	588.5	702.0
Musoma	A	2,880.1	3,205.6	3,201.4	1,106.4	1,369.2	1,235.9	550.0	687.0	728.0
Mwanza	A	20,269.5	21,246.6	21,057.0	9,204.5	9,742.2	8,944.4	2,556.6	3,118.9	3,245.4
Shinyanga	A	4,377.8	4,887.6	5,839.2	2,417.4	2,477.8	3,405.1	568.6	733.4	561.1
Songea	A	2,762.7	2,957.7	2,712.6	597.5	510.2	368.9	561.4	876.2	487.2
Tabora	A	4,532.0	5,075.9	5,010.2	2,194.8	2,724.3	2,451.4	587.6	598.7	686.7
Tanga	A	9,265.1	9,294.4	10,387.3	2,295.8	2,331.0	2,453.3	2,726.5	2,717.3	2,941.9
<b>Average Category A</b>		<b>205,674.1</b>	<b>196,521.7</b>	<b>234,534.4</b>	<b>59,574.0</b>	<b>88,914.2</b>	<b>104,227.5</b>	<b>58,669.9</b>	<b>38,069.5</b>	<b>40,270.3</b>
Bukoba	B	1,876.7	4,369.8	3,952.1	715.7	1,080.0	1,247.5	481.6	707.4	1,832.2
Kigoma	B	2,994.3	2,979.8	1,954.3	1,709.4	1,025.7	940.6	310.0	766.5	299.9
Singida	B	2,199.7	2,556.8	2,797.0	830.4	1,102.2	948.3	438.1	575.2	737.2
Sumbawanga	B	1,363.3	1,498.3	1,531.2	372.0	557.5	557.6	228.8	247.1	265.6
Babati	C	1,799.7	1,981.7	2,527.1	760.4	964.6	1,122.8	384.2	432.6	564.7
Lindi	C	705.4	643.1	1,155.8	238.4	401.9	562.7	174.5	109.4	183.2
Bariadi	C	169.0	301.5	320.3	75.0	96.1	135.4	23.5	121.8	67.4
Geita	C	164.8	420.9	1,653.9	41.4	81.7	997.9	47.9	159.0	380.0
Mpanda	C	1,717.8	1,642.1	707.5	1,265.9	155.0	182.2	133.8	137.0	144.5
Njombe	C	899.9	802.8	843.1	128.9	71.3	77.4	334.3	320.5	289.2
Vwawa-Mlowo	-	-	60.1	97.7	-	9.1	21.8	-	16.3	35.5
<b>Average Category B&amp;C</b>		<b>13,890.6</b>	<b>17,256.8</b>	<b>17,539.9</b>	<b>6,137.5</b>	<b>5,545.1</b>	<b>6,794.4</b>	<b>2,556.7</b>	<b>3,592.8</b>	<b>4,799.4</b>
<b>OVERALL AVERAGE</b>		<b>219,564.6</b>	<b>213,718.4</b>	<b>251,976.6</b>	<b>65,711.5</b>	<b>94,450.2</b>	<b>111,000.0</b>	<b>61,226.6</b>	<b>41,646.1</b>	<b>45,034.2</b>

**Table A2.16 Cost Structure: Personnel Costs and Other Costs**

Utilities	Category	Personnel Costs (Millions TZS)			Other Costs (Millions TZS)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	4,028.0	4,865.9	4,931.0	408.9	576.9	683.2
DAWASA	A	25,509.2	24,004.4	36,889.8	19,148.1	1,554.9	2,777.9
Dodoma	A	4,246.3	3,841.0	4,436.5	131.0	206.9	251.9
Iringa	A	1,740.2	1,907.0	2,213.1	156.4	397.6	267.7
Kahama	A	1,023.2	1,147.3	1,145.5	228.4	114.3	198.4
Mbeya	A	3,421.7	3,944.6	4,057.7	488.4	259.3	1,883.5
Morogoro	A	3,252.0	2,584.1	4,697.9	122.5	436.5	143.0
Moshi	A	3,161.6	3,345.4	3,568.9	688.6	454.4	72.5
Mtwara	A	926.9	991.2	1,065.7	28.9	124.2	54.1
Musoma	A	1,155.3	1,067.7	1,184.0	68.3	81.6	53.5
Mwanza	A	7,394.3	7,273.3	7,895.9	1,114.1	1,112.3	971.3
Shinyanga	A	1,312.4	1,601.5	1,784.6	79.4	75.0	88.4
Songea	A	1,416.8	1,460.1	1,698.0	187.1	111.3	158.6
Tabora	A	1,538.4	1,683.7	1,746.4	211.2	69.2	125.6
Tanga	A	3,623.7	3,532.8	4,360.3	619.2	713.3	631.7
<b>AVERAGE Category A</b>		<b>63,749.8</b>	<b>63,250.0</b>	<b>81,675.2</b>	<b>23,680.3</b>	<b>6,287.9</b>	<b>8,361.5</b>
Bukoba	B	638.4	741.2	817.9	41.0	1,841.2	54.5
Kigoma	B	934.9	1,166.5	680.4	39.9	21.2	33.4
Singida	B	902.7	845.9	1,054.9	28.5	33.6	56.5
Sumbawanga	B	645.1	676.1	680.4	117.4	17.5	27.6
Babati	C	637.9	570.3	799.4	17.2	14.2	40.2
Lindi	C	280.2	126.6	401.9	12.3	5.2	7.8
Bariadi	C	66.7	82.5	116.9	3.8	1.0	0.6
Geita	C	72.5	165.9	266.3	3.0	14.3	9.7
Mpanda	C	307.8	319.3	373.1	10.4	1,030.7	7.6
Njombe	C	400.7	393.6	457.3	36.0	17.3	19.2
Vwawa-Mlowo		-	34.1	39.2	-	0.6	1.2
<b>AVERAGE Category B&amp;C</b>		<b>4,886.9</b>	<b>5,122.1</b>	<b>5,687.8</b>	<b>309.5</b>	<b>2,996.8</b>	<b>258.5</b>
<b>OVERALL AVERAGE</b>		<b>68,636.7</b>	<b>68,338.0</b>	<b>87,323.7</b>	<b>23,989.9</b>	<b>9,284.1</b>	<b>8,618.7</b>

**Table A2.17: Working Ratio, Operating Ratio and Average Tariff in use**

Name of Water Utilities	Category	Working Ratio			Operating Ratio			Average Tariff in Use (TZS/m <sup>3</sup> )		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	0.71	0.83	0.81	0.82	0.96	0.93	1,115	1,240	1,549
DAWASA	A	0.96	0.83	0.83	0.98	0.86	0.99	1,663	1,663	1,663
Dodoma	A	0.81	0.80	0.81	1.01	0.99	1.23	1,255	1,255	1,383
Iringa	A	0.74	0.66	0.72	1.21	1.03	1.12	1,518	1,897	2,000
Kahama	A	0.98	0.89	0.91	1.12	0.98	1.00	1,367	1,367	1,961
Mbeya	A	0.80	0.99	0.95	1.09	1.28	1.19	732	732	1,175
Morogoro	A	0.94	0.97	0.97	1.14	1.28	1.07	1,106	1,274	1,578
Moshi	A	0.82	0.79	0.78	0.94	0.91	0.90	704	704	800
Mtwara	A	0.79	0.80	0.93	1.00	0.92	1.07	1,105	1,105	1,460
Musoma	A	0.88	1.04	1.01	0.96	1.06	1.11	1,082	1,082	1,410
Mwanza	A	0.89	0.97	0.86	1.02	1.09	1.00	972	972	1,060
Shinyanga	A	0.84	0.91	0.92	1.00	1.08	1.06	1,395	1,465	1,836
Songea	A	0.93	0.80	0.74	1.20	0.96	0.89	957	957	1,077
Tabora	A	0.83	1.13	0.86	0.94	1.27	0.98	1,205	1,305	1,306
Tanga	A	0.78	0.75	0.75	0.89	0.92	0.91	1,216	1,216	1,798
<b>Average Category A</b>		<b>0.85</b>	<b>0.88</b>	<b>0.86</b>	<b>1.02</b>	<b>1.04</b>	<b>1.03</b>	<b>1,160</b>	<b>1,216</b>	<b>1,470</b>
Bukoba	B	0.85	1.83	1.45	0.98	1.95	1.93	1,258	1,380	1,613
Kigoma	B	1.67	1.93	1.09	1.78	2.17	1.30	849	849	1,400
Singida	B	0.88	1.00	0.90	1.01	1.03	1.25	1,277	1,277	1,715
Sumbawanga	B	1.01	0.93	1.00	1.37	1.25	1.32	881	1,057	925
Babati	C	0.98	0.95	1.02	1.46	1.43	1.44	1,287	1,287	1,748
Lindi	C	1.96	1.12	1.01	3.15	1.83	1.42	1,117	1,117	1,700
Bariadi	C	0.92	1.86	1.41	1.42	2.38	1.79	730	730	730
Geita	C	0.40	0.69	1.59	0.40	1.41	2.33	649	649	1,305
Mpanda	C	3.31	2.75	0.91	3.65	3.03	1.13	823	976	976
Njombe	C	0.88	0.87	0.90	1.02	1.03	1.09	951	1,003	1,003
Vwawa-Mlowo		-	0.88	1.02	-	1.72	1.63	-	395	395
<b>Average Category B&amp;C</b>		<b>1.3</b>	<b>1.3</b>	<b>1.12</b>	<b>1.62</b>	<b>1.75</b>	<b>1.51</b>	<b>982</b>	<b>975</b>	<b>1,228</b>
<b>OVERALL AVERAGE</b>		<b>1.0</b>	<b>1.1</b>	<b>0.97</b>	<b>1.26</b>	<b>1.32</b>	<b>1.22</b>	<b>1,089</b>	<b>1,142</b>	<b>1,407</b>

**Table A2.18: Total Collections**

Name of Water Utilities	Category	Water and Sewerage Collections (TZS Million)			Other Collections (TZS Million)			Total Collections (TZS Million)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	11,148.5	12,131.9	14,843.6	1,316.0	1,338.2	2,069.7	12,464.4	13,470.0	16,913.2
DAWASA	A	73,641.8	105,359.2	121,389.3	-	7,790.3	13,990.8	73,641.8	113,149.5	135,380.0
Dodoma	A	14,840.8	16,251.7	19,771.0	-	2,213.0	-	14,840.8	18,464.7	19,771.0
Iringa	A	6,127.0	8,028.6	7,338.7	186.0	526.0	551.7	6,312.9	8,554.6	7,890.4
Kahama	A	4,350.5	6,557.1	6,605.2	-	380.6	-	4,350.5	6,937.7	6,605.2
Mbeya	A	9,193.2	9,949.6	8,939.7	393.5	406.8	622.2	9,586.7	10,356.4	9,561.9
Morogoro	A	8,244.3	8,347.1	9,544.5	401.9	-	166.8	8,646.2	8,347.1	9,711.2
Moshi	A	7,336.4	7,823.7	8,285.0	1,617.6	1,644.4	4,505.6	8,954.0	9,468.0	12,790.6
Mtwara	A	3,080.0	3,339.4	3,352.1	721.3	391.5	-	3,801.3	3,730.9	3,352.1
Musoma	B	3,040.0	2,603.6	4,818.1	26.1	120.7	-	3,066.1	2,724.3	4,818.1
Mwanza	A	22,289.0	23,201.6	23,260.7	399.2	315.7	-	22,688.2	23,517.2	23,260.7
Shinyanga	A	4,816.0	4,812.0	5,988.4	81.8	525.0	-	4,897.8	5,337.0	5,988.4
Songea	A	2,777.9	2,783.0	3,023.6	93.5	306.5	61.7	2,871.4	3,089.5	3,085.3
Tabora	A	3,981.5	3,510.8	4,419.0	3,602.3	1,802.7	787.4	7,583.8	5,313.4	5,206.4
Tanga	A	10,518.9	11,306.3	12,718.0	483.1	498.7	450.0	11,002.1	11,805.1	13,167.9
<b>Total Category A</b>		<b>185,385.8</b>	<b>226,005.6</b>	<b>254,296.9</b>	<b>9,322.1</b>	<b>18,260.0</b>	<b>23,205.7</b>	<b>194,707.9</b>	<b>244,265.6</b>	<b>277,502.6</b>
Bukoba	B	2,281.7	2,249.8	2,073.1	-	175.8	-	2,281.7	2,425.6	2,073.1
Kigoma	B	1,597.3	1,423.3	1,589.2	-	-	-	1,597.3	1,423.3	1,589.2
Singida	B	1,656.6	1,740.7	2,289.1	126.1	695.7	763.0	1,782.7	2,436.4	3,052.2
Sumbawanga	B	1,040.5	1,266.0	1,124.7	-	-	-	1,040.5	1,266.0	1,124.7
Babati	C	1,424.2	1,627.0	1,736.2	392.5	347.1	1,577.4	1,816.6	1,974.1	3,313.6
Lindi	C	210.4	235.6	348.1	-	28.8	116.0	210.4	264.4	464.1
Bariadi	C	154.2	153.8	165.9	-	38.5	-	154.2	192.3	165.9
Geita	C	363.2	538.9	1,035.2	363.2	127.2	-	726.4	666.1	1,035.2
Mpanda	C	444.7	422.9	511.7	144.9	208.5	185.1	589.6	631.4	696.8
Njombe	C	786.3	871.6	879.4	45.5	33.0	46.6	831.8	904.6	925.9
Vwawa-Mlowo			277	74.2		32.5	21.4	-	60.1	95.6
<b>Total Category B&amp;C</b>		<b>9,959.1</b>	<b>10,557.2</b>	<b>11,826.9</b>	<b>1,072.2</b>	<b>1,687.0</b>	<b>2,709.5</b>	<b>11,031.3</b>	<b>12,244.3</b>	<b>14,536.4</b>
<b>TOTAL</b>		<b>195,344.8</b>	<b>236,562.8</b>	<b>266,123.8</b>	<b>10,394.3</b>	<b>19,947.1</b>	<b>25,915.2</b>	<b>205,739.1</b>	<b>256,509.9</b>	<b>292,039.0</b>

**Table A2.19: Total Staff, Female Staff and Staff per 1,000 Water & Sewerage Connections**

Name of Water Utilities	Category	Total Staff (Number)			Total Female Staff (Number)			Staff/1000 Connections (W&S)		
		2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Arusha	A	244	284	314	57	69	74	5	5	5
DAWASA		1055.0	1060	1113	331.0	331.0	357	4	3.5	4.0
Dodoma	A	207	188	184	45	40	43	5	4	4
Iringa	A	94	101	106	22	21	23	4	4	4
Kahama	A	41	63	52	14	12	11	3	4	3
Mbeya	A	197	223	229	50	65	64	4	4	3
Morogoro	A	158	120	127	27	29	29	5	4	4
Moshi	A	196	179	200	63	57	66	6	5	5
Mtwara	A	67	55	54	18	15	15	6	4	4
Musoma	A	77	59.0	65	21	21	17.0	6	4	4
Mwanza	A	276	282	312	76	76	79	4	4	4
Shinyanga	A	85	79	82	29	22	26	5	4	4
Songea	A	54	53	52	12	17	18	4	3	3
Tabora	A	100	78	91	20	21	22	6	4	5
Tanga	A	161	162	170	35	36	35	4	4	4
<b>Total/Average Category A</b>		<b>3012</b>	<b>2986</b>	<b>3151</b>	<b>820</b>	<b>832</b>	<b>879</b>	<b>4.2</b>	<b>3.9</b>	<b>4.0</b>
Bukoba	B	64	59	55	16	15	13	7	6	5
Kigoma	B	57	58	46	11	8	6	6	6	4
Singida	B	76	47	45	15	12	12	8	4	4
Sumbawanga	B	45	44	50	11	12	14	6	6	6
Babati	C	49	24	28	12	11	12	8	3	3
Lindi	C	38	38	37	7	7	12	11	10	9
Baradi	C	16	16	14	3	3	0	18	17	12
Geita	C	30	8	26	4	5	10	10	2	4
Mpanda	C	53	30	30	11	12	10	11	6	6
Njombe	C	40	40	37	9	9	11	7	6	5
Vwawa- Mlowo	C		22	13		4	4		13	7
<b>Total/Average Category B and C</b>		<b>468</b>	<b>386</b>	<b>381</b>	<b>99</b>	<b>98</b>	<b>104</b>	<b>8</b>	<b>6</b>	<b>5</b>
<b>TOTAL/AVERAGE</b>		<b>3,480</b>	<b>3,372</b>	<b>3,532</b>	<b>919</b>	<b>930</b>	<b>983</b>	<b>5</b>	<b>4</b>	<b>4</b>

**APPENDIX 3:**  
**SUMMARY OF THREE YEARS PERFORMANCE**  
**DATA FOR NATIONAL PROJECT WSSAs**

**Table A3.1 (a): Water Abstraction Trend**

Name of Water Utility	2016/17						2017/18						2018/19					
	B/Holes	Springs	Dams	Lakes	Rivers	Total	B/Holes	Springs	Dams	Lakes	Rivers	Total	B/Holes	Springs	Dams	Lakes	Rivers	Total
Chalinze	-	-	-	-	2.59	2.59	0	0	0	0	2.59	2.59	0	0	0	0	2.64	2.64
HTM	-	-	-	-	1.88	1.88	0	0	0	0	1.71	1.71	0	0	0	0	1.41	1.41
KASHWASA	-	-	-	13.83	-	13.83	0	0	0	14.96	0	14.96	-	-	-	17.31	-	17.31
Makonde	0.54	0.44	-	-	-	0.98	0.12	0.36	0	0	0	0.47	0.46	0.20	0.00	0.00	0	0.66
MANAWASA	-	1.83	-	-	-	1.83	0	1.59	0	0	0	1.59	0	2.12	0	0	0	2.12
Maswa	-	-	1.91	-	-	1.91	0	0	0.53	0	0	0.53	0	0	1.95	0	0	1.95
Mugango-Kiabakari	-	-	-	1.54	-	1.54	0	0	0	1.05	0	1.05	-	-	-	1.05	-	1.05
Wanging'ombe	-	-	-	-	2.30	2.30	0	0	0	0	2.21	2.21	-	-	-	-	1.57	1.57
<b>Total</b>	<b>0.54</b>	<b>2.27</b>	<b>1.91</b>	<b>15.37</b>	<b>6.77</b>	<b>26.86</b>	<b>0.12</b>	<b>1.95</b>	<b>0.53</b>	<b>16.01</b>	<b>6.52</b>	<b>25.13</b>	<b>0.46</b>	<b>2.32</b>	<b>1.95</b>	<b>18.37</b>	<b>5.62</b>	<b>28.72</b>

**Table A3.1 (b) Water Abstraction Summary**

Source	2016/17			2017/18			2018/19		
	Abstraction (Million m <sup>3</sup> )	% contribution to total abstraction	Abstraction (Million m <sup>3</sup> )	% contribution to total abstraction	Abstraction (Million m <sup>3</sup> )	% contribution to total abstraction	Abstraction (Million m <sup>3</sup> )	% contribution to total abstraction	Abstraction (Million m <sup>3</sup> )
<b>NATIONAL PROJECT WSSAs WATER SOURCES</b>									
Boreholes	0.54	2%	0.12	0.5%	0.46	1.6%			
Springs	2.28	8%	1.95	8%	2.32	8%			
Dams	1.91	7%	0.53	2%	1.95	7%			
Lakes	15.37	57%	16.01	64%	18.37	64%			
Rivers	6.77	25%	6.52	26%	5.62	20%			
<b>TOTAL</b>	<b>26.87</b>	<b>100%</b>	<b>25.13</b>	<b>100%</b>	<b>28.72</b>	<b>100%</b>			

**Table A3.2: Water Demand, Water Production and Installed Water Production Capacity**

Name of Water Utility	Water Demand (Million m <sup>3</sup> /year)			Annual Water Production (Million m <sup>3</sup> /year)			Installed Water Production Capacity (Million m <sup>3</sup> /year)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	1.91	3.61	3.61	1.28	1.20	1.41	2.63	2.63	2.63
HTM	4.92	5.11	5.25	1.88	1.71	1.36	3.34	3.34	3.34
KASHWASA	15.33	14.96	16.22	12.81	14.96	15.42	29.20	29.20	29.20
Makonde	8.59	8.70	7.46	0.98	0.47	0.60	8.90	8.90	3.90
MANAWASA	5.01	3.88	4.22	1.83	1.59	2.12	5.29	5.29	5.29
Maswa	2.62	2.75	2.84	1.91	0.53	1.95	3.78	3.78	3.78
Mugango-Kiabakari	3.60	3.46	3.55	1.54	1.05	1.05	3.50	3.50	3.50
Wanging'ombe	3.89	3.89	3.89	2.30	2.21	1.57	2.66	2.66	2.66
<b>TOTAL</b>	<b>45.87</b>	<b>46.36</b>	<b>47.04</b>	<b>24.53</b>	<b>23.73</b>	<b>25.48</b>	<b>59.30</b>	<b>59.31</b>	<b>54.31</b>

**Table A3.3: Length of Water Network, Water Storage Capacity and Water Connections per Km Length of Network**

Name of Water Utilities	Total Length of Water Network (km)			Storage Capacity (hrs)			No. of Water Connections per Km Length of Network		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	627.0	1,036	627	54	31	30.5	6.3	4.1	7.1
HTM	472.6	473	473	11.1	10.7	10.5	4.6	4.8	5.1
KASHWASA	318.7	318.7	318.7	20.0	20.5	18.9	0.2	0.2	2.3
Makonde	1,320	1,320	1,331	13.9	14.5	16.1	2.1	2.2	13.6
MANAWASA	420	510.8	516.6	48.8	64.3	570	18.2	17.3	19.4
Maswa	161	161	166.8	2.8	2.6	2.5	20.2	20.4	21.7
Mugango-Kiabakari	103	109	109.9	5.5	5.8	5.6	7.4	7.7	8.8
Wanging'ombe	388	390	397.6	9.9	9.8	9.9	12.0	12.4	13.6
<b>TOTAL/AVERAGE</b>	<b>3,810.3</b>	<b>4,318.5</b>	<b>3,940.6</b>	<b>20.8</b>	<b>19.9</b>	<b>18.9</b>	<b>8.9</b>	<b>8.7</b>	<b>11.4</b>

**Table A3.4: No. of Pipe Breaks per Km per year, Water Service Connections Rehabilitation and Water Main Rehabilitation % per year**

Name of Water Utilities	Total Length of Water Network (km)			No. of Pipe Breaks per km per year			Water Service Connections Rehabilitation (%) per year		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	627	1036	627	0.3	0.37	0.08	0	0	0
HTM	472.6	473	473	0.70	0.66	0.67	0	0	0
KASHWASA	318.7	318.7	318.7	0.9	0.56	0.39	0	0	0
Makonde	1320	1320	1331	0.10	0.14	0.10	0	3.5	0
MANAWASA	420	510.81	516.56	0.6	0.56	0.10	0	0	0
Maswa	161	161	166.8	0.30	0.32	0.34	48	51	15.71
Mugango-Kiabakari	103	109	109.9	0.9	0.9	1.46	0	0	13.51
Wanging'ombe	388	390	397.6	0.70	0.04	0.43	2.43	2789	2.05
<b>Average</b>	<b>3183.3</b>	<b>3282.51</b>	<b>3313.56</b>	<b>0.5</b>	<b>0.44</b>	<b>0.45</b>	<b>50.43</b>	<b>82.39</b>	<b>31.28</b>

**Table A3.5: Non – revenue Water**

Name of Water Utilities	NRW (%)			NRW (m³ lost/km/day)			NRW (m³ lost/connection/day)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	32.9	28.2	25.8	1.8	0.9	1.6	0.3	0.2	0.2
HTM	78.7	79.3	75.8	8.6	7.9	6.0	1.8	1.6	1.2
KASHWASA	7.8	9.3	8.8	8.6	12.0	11.7	41.5	53.8	50.4
Makonde	63.3	51.9	47.0	1.3	0.5	0.6	0.6	0.2	0.2
MANAWASA	25.8	24.8	25.4	3.1	2.1	2.9	0.2	0.1	0.1
Maswa	73.6	74.7	36.6	23.9	6.8	11.7	1.2	0.3	0.5
Mugango-Kiabakari	76.4	80.3	85.7	31.3	21.1	22.5	4.2	2.8	2.8
Wanging'ombe	67.4	62.6	53.6	11	9.7	5.8	0.9	0.8	0.4
<b>AVERAGE</b>	<b>33.1</b>	<b>26.8</b>	<b>23.7</b>	<b>5.8</b>	<b>4.0</b>	<b>4.2</b>	<b>0.9</b>	<b>0.6</b>	<b>0.6</b>

**Table A3.6: Water Quality Compliance (%)**

Name of Water Utility	2016/17					2017/18					2018/19				
	E-coli	Turbidity	Residual Chlorine	pH	Average	E-coli	Turbidity	Residual Chlorine	pH	Average	E-coli	Turbidity	Residual Chlorine	pH	Average
	% Compliance					% Compliance					% Compliance				
Chalinze	nm	100	50	100	83.33	N/A	100	50.00	100	83.33	0.00	99.58	100	100	74.90
HTM	nm	nm	nm	nm	0	nm	nm	nm	nm	0.00	nm	nm	nm	nm	0
KASHWASA	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Makonde	71.9	29.4	7.3	15.2	30.95	8.00	7.00	0.05	6.80	5.46	0.00	2.00	4.00	6.00	3
MANAWASA	0	0	0	0	0	100	100	100	100	100	100	100	100	100	100
Maswa	85	75	100	100	90	90	80	100	100	92.50	95	100	71.00	100	91.50
Mugango-Kiabakari	90	100	100	100	97.5	63	25	50	100	59.50	66.70	75	25	100	66.68
Wanging'ombe	nm	nm	nm	nm	0	nm	nm	nm	nm	0	nm	nm	nm	nm	0.00
<b>AVERAGE</b>	<b>69.4</b>	<b>67.4</b>	<b>59.6</b>	<b>69.2</b>	<b>50.2</b>	<b>72.2</b>	<b>68.7</b>	<b>66.7</b>	<b>84.5</b>	<b>55.1</b>	<b>60.28</b>	<b>79.43</b>	<b>66.67</b>	<b>84.33</b>	<b>54.51</b>

**Table A3.7: Total Water Connections, Domestic Connections and Public Water Kiosks**

Utilities	Total Water Connections (Number)				Domestic Water Connections (Number)				Public Water Kiosks (Number)				Operating Kiosks	Composition of Customers 2018/19				
	2016/17	2017/18	2018/19		2016/17	2017/18	2018/19		2016/17	2017/18	2018/19		2018/19	Domestic	Institutional	Commercial	Industrial	Kiosk
																		Other Connections
Chalinze	3,979	4,262	4,459		2,894	3,118	3,269		653	687	643		615	3,269	194	323	30	615
HTM	2,196	2,281	2,435		1,816	1,872	2,000		191	207	221		165	2,000	129	50	221	35
KASHWASA	66	71	74		3	65	0		NA	NA	NA		NA	0	5	1	0	68
Makonde	2,830	2,940	3,089		2,014	2,065	2,205		547	550	550		250	2,055	256	52	3	504
MANAWASA	7,635	8,853	10,020		6,919	8,052	9,126		242	314	366		335.00	9,126	312	241	4	335
Maswa	3,247	3,285	3,622		3,070	3,070	3,477		40	40	40		28	1,523	98	106	7	40
Mugango-Kiabakari	763	836	962		681	748	870		29	32	26		21	870	43	23	0	26
Wanging'ombe	4,651	4,841	5,393		4,013	4,178	4,700		697	491	510		479	4,267	104	24	0	280
<b>Total</b>	<b>25,367</b>	<b>27,369</b>	<b>30,054</b>		<b>21,410</b>	<b>23,168</b>	<b>25,647</b>		<b>2,399</b>	<b>2,321</b>	<b>2,356</b>		<b>1,893</b>	<b>23,110</b>	<b>1,141</b>	<b>820</b>	<b>265</b>	<b>1,903</b>

**Table A3.8: Metering Ratio and Composition of Metered Customers**

Utilities	Metering Ratio (%)			Composition of Metered Customers 2018/19				
	2016/17	2017/18	2018/19	Domestic	Institutional	Commercial	Industrial	Kiosk
Chalinze	100	97	100	3,269	194	323	30	615
HTM	100	100	100	2,000	129	50	221	35
KASHWASA	100	100	100	0	73	1	0	NA
Makonde	83.06	77	92	2,205	279	52	3	550
MANAWASA	100	100	100	9,126	312	241	4	335
Maswa	94.55	41	65	1,523	98	106	7	40
Mugango-Kiabakari	47.67	92	100	870	43	23	0	26
Wanging'ombe	78.86	87	87	4,267	104	24	0	280
<b>Average / Total</b>	<b>79.4</b>	<b>82</b>	<b>98</b>	<b>23,260</b>	<b>1232</b>	<b>820</b>	<b>265</b>	<b>1881</b>

**Table A3.9: Proportion of Population Living in the Service Area, Number of Households and Proportion of Population Served with Water**

Utilities	Proportion of Population Living in the area with water network (%)			Proportion of Population Directly Served with water (%)				Total population (No)	Domestic connections (No)	Active Kiosk (No)	Average Number of people served per domestic connections (No)	Average Number of people served per kiosk (No)	Calculated Population Directly Served (No)
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19 Reported	2018/19 Calculated						
Chalinze	89.0	89.0	90.0	46.09	60	80	55	260,550	3,269	615	6	200	142,614
HTM	75.2	73.2	75.2	75.21	74	0	3	375,223	2,000	165	-	75	12,375
KASHWASA	NA	NA	NA	NA	NA	NA	-	NA	-	NA	NA	NA	NA
Makonde	59.0	59.0	54.3	32	29	29	19	509,693	2,205	250	10	300	97,050
MANAWASA	85.0	71.8	88.0	63	62	77	68	256,765	9,126	335	10	250	175,010
Maswa	60.0	60.0	74.4	53	48	48	20	124,459	3,477	28	5	250	24,385
Mugango-Kiabakari	74.0	74.0	50.5	63	65	33	6	177,494	870	21	6	250	10,470
Wanging'ombe	80	75.95	84.2	51	71.87	79	50	95,068	4,700	479	5	50	47,450
<b>TOTAL</b>	<b>74</b>	<b>72</b>	<b>71</b>	<b>52</b>	<b>55</b>	<b>42</b>	<b>28</b>	<b>1,799,252</b>	<b>25,647</b>	<b>1,893</b>	<b>6</b>	<b>196</b>	<b>509,354</b>

**Table A3.10: Average Hours of Service and Proportion of Connection with 24 Hours of Service**

Utilities	Average Hours of Service				Proportion of Population with 24 Hours of Service (%)			
	2016/17	2017/18	2018/19	2019/20	2016/17	2017/18	2018/19	2019/20
Chalinze	13.5	13.5	13.5	13.5	0	0	0	0
HTM	8	11	3	9.54	9.54	42	3	3
KASHWASA	23	23	24	100	100	100	100	100
Makonde	12	10	12	0	0	0	N/A	N/A
MANAWASA	20	22	22	0	0	0	8.33	8.33
Maswa	5	6	10	0	0	0	0	0
Mugango-Kiabakari	12	8	8	15	15	15	15	15
Wanging'ombe	7	16	15.5	0	0	0	0	0
<b>Average</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>16</b>	<b>16</b>	<b>20</b>	<b>18</b>	<b>18</b>

**Table A3.11: Billing Composition**

UTILITY	Water Billing (TZS Million)			Other Operational Billing (TZS Million)			Total Billing (TZS Million)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	1,618.15	1,644.1	1,891.4	850.50	258.7	281.0	2,468.6	1,902.7	2,172.4
HTM	604.07	542.4	554.6	55.53	57.0	60.6	659.6	599.3	615.1
KASHWASA	8,424.54	9,553.8	11,610.4	3.4	6.1	2.7	8,427.9	9,560.0	11,613.1
Makonde	588.82	124.7	259.8	31.95	22.7	42.5	620.8	147.4	302.3
MANAWASA	1,985.30	2,042.5	2,444.2	530.24	328.7	375.2	2,515.5	2,371.2	2,819.4
Maswa	480.53	422.4	311.6	103.20	-	21.9	583.7	422.4	333.5
Mugango-Kiabakari	137.87	106.9	81.3	141.19	154.1	5.9	279.1	261.0	87.2
Wanging'ombe	186.7	186.7	313.7	185.8	185.8	93.5	372.5	372.5	407.2
<b>TOTAL</b>	<b>14,026.00</b>	<b>14,623.48</b>	<b>17,466.95</b>	<b>1,901.81</b>	<b>1,013.09</b>	<b>883.28</b>	<b>15,927.82</b>	<b>15,636.57</b>	<b>18,350.23</b>

**Table A3.12: Revenue Collection**

Name of Water Utility	Collections from Water Sales (TZS Million)			Other Collections (TZS Million)			Total Collections (TZS Million)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	1,523.25	1,550.6	1,753.5	514.87	514.9	472.2	2,038.1	2,065.5	2,225.6
HTM	575.46	584.0	499.0	54.87	56.3	236	630.3	640.3	522.6
KASHWASA	8,081.79	10,259.0	11,231.2	2.94	1,725.5	-	8,084.7	11,984.6	11,231.2
Makonde	237.51	224.2	78.4	33.96	55.8	20.2	271.5	280.0	98.7
MANAWASA	1,790.80	1,839.6	2,590.3	-	-	374.3	1,790.8	1,839.6	2,964.7
Maswa	235.63	178.0	248.6	139.25	170.8	86.6	374.9	348.8	335.3
Mugango-Kiabakari	677.5	86.7	67.8	3.5	-	6.7	71.3	86.7	74.5
Wanging'ombe	169.02	219.0	282.3	-	-	114.3	169.0	219.0	396.6
<b>TOTAL</b>	<b>12,681.21</b>	<b>14,941.22</b>	<b>16,751.15</b>	<b>749.42</b>	<b>2,523.22</b>	<b>1,097.94</b>	<b>13,430.63</b>	<b>17,464.44</b>	<b>17,849.09</b>

**Table A3.13: Revenue Collection Efficiency, Overall Collection Efficiency and Accounts Receivables**

Name of Water Utility	Revenue Collection Efficiency (%)			Overall Collection Efficiency (%)			Accounts Receivable (Months of Billing)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	90.91	94.1	92.7	61.0	67.6	68.8	10.3	14.9	3.3
HTM	97.45	95.3	90.0	20.8	19.8	21.7	4.4	9.3	4.2
KASHWASA	89.55	95.9	96.7	82.6	87.0	88.2	6.1	3.0	2.2
Makonde	70.24	40.3	30.2	25.8	19.4	16.0	25.5	274.2	31.6
MANAWASA	88.63	90.2	106.0	65.8	67.9	79.0	5.5	6.7	2.9
Maswa	45.92	49.0	79.8	12.1	12.4	50.6	3.1	7.6	6.4
Mugango-Kiabakari	26.80	49.1	83.5	6.3	9.7	11.9	71.4	92.1	17.2
Wanging'ombe	80.08	90.5	90.0	26.1	33.8	41.7	69.6	18.1	4.4
<b>AVERAGE</b>	<b>73.70</b>	<b>75.57</b>	<b>83.60</b>	<b>37.55</b>	<b>39.69</b>	<b>47.26</b>	<b>24.47</b>	<b>53.23</b>	<b>9.01</b>

**Table A3.14: Cost Structure: Production, Distribution, Maintenance, Personnel, Administration and Other Costs**

Name of Water Utilities	Production, Distribution and Maintenance Costs (TZS Million)		Personnel Costs (TZS Million)		Administration and Other Costs (TZS Million)	
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	1,673.72	2,129.9	1,738.4	1,329.04	1,000.6	1,372.3
HTM	751.14	814.9	693.3	540.34	503.1	550.8
KASHWASA	5,101.00	6,473.2	6,244.7	1,481.30	1,362.0	1,578.6
Makonde	1,515.85	264.4	1,228.0	136.97	61.4	337.5
MANAWASA	457.06	472.7	522.0	880.61	881.5	1,120.7
Maswa	1,478.91	305.9	419.4	512.86	134.7	99.1
Mugango-Kiabakari	508.68	322.8	407.8	58.67	61.2	78.0
Wanging'ombe	793.31	793.3	83.8	180.81	180.8	145.4
<b>TOTAL</b>	<b>12,279.66</b>	<b>11,577.07</b>	<b>11,337.53</b>	<b>5,120.60</b>	<b>4,285.20</b>	<b>5,282.32</b>
				<b>2,850.07</b>	<b>4,742.71</b>	<b>2,677.44</b>

**Table A3.15: Cost Structure: Operating Costs and Depreciation**

Name of Water Utility	Total O&M Costs excluding Depreciation (TZS Million)			Depreciation and Amortisation Costs (TZS Million)			Total Costs (TZS Million)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	3,778.78	3,865.0	3,604.2	3,613.43	1,308.4	587.7	7,392.2	5,173.4	4,191.9
HTM	1,436.87	1,434.8	1,425.7	-	-	230.5	1,436.9	1,434.8	1,656.2
KASHWASA	8,416.50	11,193.7	9,453.2	1,990.65	1,855.2	1,683.3	10,407.1	13,048.9	11,136.4
Makonde	1,758.77	1,156.9	1,729.7	-	-	56.2	1,758.8	1,156.9	1,785.9
MANAWASA	1,844.61	1,834.4	2,360.5	916.62	916.6	1,022.0	2,761.2	2,751.0	3,382.5
Maswa	2,300.44	462.5	642.4	81.24	-	205.0	2,381.7	462.5	847.3
Mugango-Kiabakari	622.17	484.5	604.2	-	-	732.5	622.2	484.5	1,336.8
Wanging'ombe	1,055.53	1,055.5	325.8	817.90	381.4	333.5	1,873.4	1,436.9	659.4
<b>TOTAL</b>	<b>21,213.68</b>	<b>21,487.34</b>	<b>20,145.68</b>	<b>7,419.84</b>	<b>4,461.67</b>	<b>4,850.69</b>	<b>28,633.53</b>	<b>25,949.02</b>	<b>24,996.37</b>

**Table A3.16: Energy and Chemical Costs**

UTILITY	Energy Costs			Chemical Costs			Total Energy and Chemical Costs		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	987.77	763.3	1,280.6	188.68	166.2	179.7	1,176.5	929.5	1,460.3
HTM	562.27	577.5	442.8	56.23	25.0	27.5	618.5	602.5	470.3
KASHWASA	3,788.76	4,729.3	4,852.1	956.93	1,547.2	1,163.1	4,745.7	6,276.5	6,015.2
Makonde	942.48	942.5	1,180.2	6.93	-	-	949.4	942.5	1,180.2
MANAWASA	309.27	366.6	535.6	11.81	11.8	7.8	321.1	378.4	543.3
Maswa	603.80	259.6	270.3	842.50	4.0	4.2	1,446.3	263.6	274.5
Mugango-Kiabakari	462.79	296.5	266.0	1.08	0.3	0.1	463.9	296.8	266.1
Wanging'ombe	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>7,657.14</b>	<b>7,935.20</b>	<b>8,827.61</b>	<b>2,064.16</b>	<b>1,754.50</b>	<b>1,382.28</b>	<b>9,721.30</b>	<b>9,689.71</b>	<b>10,209.90</b>

**Table A3.17: Operating Ratio, Working Ratio and Average Tariff in Use**

UTILITY	Operating Ratio			Working Ratio			Average Tariff in Use (TZS/m3)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	3.00	2.7	1.9	1.50	2.0	1.7	1,607.4	1,849.3	1,923.3
HTM	2.20	2.4	2.7	2.20	2.4	2.3	1,274.4	1,274.4	2,473.0
KASHWASA	1.20	1.4	1.0	1.00	1.2	0.8	502.2	575.7	785.0
Makonde	2.80	7.8	5.9	2.80	7.8	5.7	540.0	540.0	1,300.0
MANAWASA	1.10	1.2	1.2	0.70	0.8	0.8	1,331.0	1,557.3	1,467.0
Maswa	4.10	1.1	2.5	3.9	1.1	1.9	445.0	445.0	1,100.0
Mugango-Kiabakari	2.20	1.9	15.3	2.20	1.9	6.9	345.0	345.0	407.0
Wanging'ombe	5.00	3.9	1.6	2.8	2.8	0.8	345.0	345.0	345.0
<b>AVERAGE</b>	<b>2.70</b>	<b>2.80</b>	<b>4.02</b>	<b>2.14</b>	<b>2.50</b>	<b>2.63</b>	<b>798.75</b>	<b>866.45</b>	<b>1,225.04</b>

**Table A3.18: Total Staff, Female Staff and Staff per 1,000 Water and Sewerage Connections**

Utilities	Total Staff (Number)			Total Staff Employed by WSSA (number)		Total Female Staff (Number)			Staff/1000 Connections (W&S)		
	2016/17	2017/18	2018/19	2017/18	2018/19	2016/17	2017/18	2018/19	2016/17	2017/18	2018/19
Chalinze	125	135	135	114	114	29	24	27	31.4	31.7	30.3
HTM	94	80	77	43	43	5	4	4	42.8	35.1	31.6
Kashwasa	88	75	75	4	3	21	23	23	1333.3	1056.3	1013.5
Makonde	92	80	72	33	42	19	15	15	32.5	27.2	23.3
Manawasa	87	61	73	54	67	26	27	28	11.4	6.9	7.3
Maswa	39	19	31	2	1	5	4	11	12.0	5.8	8.6
Mugango-Kiabakari	23	24	24	1	0	5	5	6	30.1	-	24.9
Wanging'ombe	51	53	51	19	19	10	12	12	11.0	10.9	9.5
<b>Total / Average</b>	<b>599</b>	<b>527</b>	<b>538</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>114</b>	<b>126</b>	<b>23.6</b>	<b>19.3</b>	<b>17.9</b>



**APPENDIX 4:**  
**COMPLIANCE WITH REGULATORY DIRECTIVES**  
**(REPORTING REQUIREMENTS AND TARIFF CONDITIONS)**

**Table A4.1(a): Status of Submission of Monthly Majlis Reports, Draft Technical Annual Report and Draft Financial Statements Among Regional WSSAs**

Utility Name	Category	Majlis Monthly Reports		Majlis Annual Report		Draft Technical Annual Report		Draft Financial Statements	
		No. of Timely Submitt- ed Reports	Submission Date	Remarks	Submission Date	Remarks	Submission Date	Remarks	
Arusha	A	3	10 <sup>th</sup> Oct 2019	Submitted lately	15 <sup>th</sup> Oct 2019	Submitted lately	30 <sup>th</sup> Sept 2019	Timely submitted	
DAWASA	A	7	28 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Dodoma	A	10	30 <sup>th</sup> Sept 2019	Timely submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely submitted	
Iringa	A	11	30 <sup>th</sup> Sept 2019	Timely submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely submitted	
Kahama	A	12	18 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Mbeya	A	0	Not Submitted	Not Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Morogoro	A	5	30 <sup>th</sup> Sept 2019	Timely Submitted	Not Submitted	Not Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Moshi	A	12	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Mtwara	A	11	1 <sup>st</sup> Oct 2019	Submitted lately	2 <sup>nd</sup> Oct 2019	Submitted lately	30 <sup>th</sup> Sept 2019	Timely Submitted	
Musoma	A	8	30 <sup>th</sup> Sept 2019	Timely Submitted	10 <sup>th</sup> Oct 2019	Submitted lately	30 <sup>th</sup> Sept 2019	Timely Submitted	
Mwanza	A	12	27 <sup>th</sup> Sept 2019	Timely Submitted	18 <sup>th</sup> Sept 2019	Timely Submitted	18 <sup>th</sup> Sept 2019	Timely Submitted	
Shinyanga	A	11	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Songea	A	12	30 <sup>th</sup> Sept 2019	Timely Submitted	27 <sup>th</sup> Sept 2019	Timely Submitted	20 <sup>th</sup> Sept 2019	Timely Submitted	
Tabora	A	12	30 <sup>th</sup> Sept 2019	Timely submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely submitted	
Tanga	A	11	28 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Bukoba	B	3	25 <sup>th</sup> Sept 2019	Timely Submitted	23 <sup>rd</sup> Sept 2019	Timely Submitted	23 <sup>rd</sup> Sept 2019	Timely Submitted	
Kigoma	B	5	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Singida	B	9	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely submitted	
Sumbawanga	B	12	28 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely submitted	
Babati	C	9	30 <sup>th</sup> Sept 2019	Timely Submitted	2 <sup>nd</sup> Oct 2019	Submitted lately	30 <sup>th</sup> Sept 2019	Timely Submitted	
Lindi	C	12	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Bariadi	C	9	20 <sup>th</sup> Sept 2019	Timely Submitted	Not submitted	Not submitted	22 <sup>nd</sup> Oct 2019	Submitted lately	
Geita	C	11	28 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Submitted lately	30 <sup>th</sup> Sept 2019	Timely Submitted	
Mpanda	C	11	Not submitted	Not submitted	28 <sup>th</sup> Sept 2019	Timely Submitted	29 <sup>th</sup> Sept 2019	Timely Submitted	
Njombe	C	12	Not submitted	Not submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	30 <sup>th</sup> Sept 2019	Timely Submitted	
Vwawa- Mlowo	C	0	Not submitted	Not submitted	17 <sup>th</sup> Oct 2019	Submitted lately	17 <sup>th</sup> O 2019	Submitted lately	

**Table A4.1(b): Status of Submission of Monthly Majlis Reports, Draft Technical Annual Report and Draft Financial Statements among NP WSSAs**

S/N	Utility	Majlis Monthly Reports		Majlis Annual Report		Draft Technical Annual Report		Draft Financial Statements	
		No. of Timely Submitted Reports		Submission Date	Remarks	Submission Date	Remarks	Submission Date	Remarks
1.	Chalinze	9		Not Submitted	Not Submitted	1 <sup>st</sup> Oct 2019	Submitted lately	30 <sup>th</sup> Sept 2019	Timely submitted
2.	HTM	0		Not Submitted	Not Submitted	Not submitted	Not submitted	1 <sup>st</sup> Oct 2019	Submitted lately
3.	KASHWASA	12		30 <sup>th</sup> Sept 2019	Timely Submitted	27 <sup>th</sup> Sept 2019	Timely submitted	27 <sup>th</sup> Sept 2019	Timely submitted
4.	Makonde	3		Not Submitted	Not Submitted	Not Submitted	Not Submitted	2 <sup>nd</sup> Oct 2019	Submitted lately
5.	MANAWASA	6		Not Submitted	Not Submitted	Not Submitted	Not Submitted	3 <sup>rd</sup> Oct 2019	Submitted lately
6.	Maswa	11		14 <sup>th</sup> Aug 2019	Timely Submitted	16 <sup>th</sup> Oct 2019	Submitted lately	16 <sup>th</sup> Oct 2019	Submitted lately
7.	Mugango-Kiabakari	11		17 <sup>th</sup> Oct 2019	Submitted lately	Not submitted	Not submitted	16 <sup>th</sup> Oct 2019	Submitted lately
8.	Wanging'ombe	12		30 <sup>th</sup> Sept 2019	Timely Submitted	Not submitted	Not submitted	4 <sup>th</sup> Oct 2019	Submitted lately

# **COMPLIANCE WITH TARIFF CONDITIONS- REGIONAL WSSAs**

#### A4.2.i. Arusha WSSA Tariff Adjustment Order, 2018 of 1<sup>st</sup> December 2018

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1	On or before 31 <sup>st</sup> March 2019, Arusha WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order.	31 <sup>st</sup> March 2019	100	Arusha WSSA submitted a revised Business Plan incorporating approved tariff order conditions by March 2019
2	Arusha WSSA shall install meters to all customers with own water sources in order to determine actual water consumption as a basis for computation of sewerage tariff.	Ongoing	0	Not implemented.
3	Arusha WSSA shall prepare a customer awareness program in order to educate its customers about its activities and importance of protecting water sources. The Plan shall be submitted to EWURA by 31 <sup>st</sup> March 2019 for review and approval prior to its implementation.	31 <sup>st</sup> March 2019	100	Not submitted
4	<b>Arusha WSSA shall implement the projects as detailed in Second Schedule to this Order by using funds generated from the approved tariffs;</b>			
	(i) To rehabilitate (activities - remove siltation and gravels, e. flushing and telescoping - casing) five boreholes	30 <sup>th</sup> June 2019	40	Rehabilitation to remove siltation and gravels undertaken at Ngusero and Lemara I & II, Sanawari 2
	(ii) To develop two boreholes at Magereza with a combined capacity of 1,100m <sup>3</sup> /day (all in 2018/19).	30 <sup>th</sup> June 2019	50	The Utility managed to develop only one borehole and is in operation.
	(iii) Acquiring and compensating residents of land for way leaves and other structures	30 <sup>th</sup> June 2019	20	The process of acquiring 165 km of land for way leaves and tanks is on progress but the compensation on areas for boreholes drilling is already paid.
	(iv) Replacement of 14 chlorine dosing pumps at Sekei, Oligilai, Ngarendolu, Machare, Ilkiurei, Midawe, Themii Hill, Kimaseki, Kilimani, Tembo Club and Burka.	30 <sup>th</sup> June 2019	30	No replacement of chlorine dosing pumps done during this period. However, Chlorine dosing pumps procured is on site waiting for installation
	(v) Replacement of 28 malfunctioning ball valves in Break Pressure Tanks (BPTs) (all in 2018/19).	30 <sup>th</sup> June 2019	0	No replacement undertaken for the Malfunctioning ball valves in BPT's. However, the Utility managed to conduct routine service of BPT's.
	(vi) Replace 9 pumps at Ilkiurei, Kiranyi I, Old Sanawari, Loruveni yard, Loruveni yard, Sekei, Sombetini, Oligilai, Machare and Magereza (borehole).	30 <sup>th</sup> June 2019	67	Two pumps replaced at Oligilai and at Machare Borehole
	(vii) To procure and install new water meters, 1/2" and 3/4".	30 <sup>th</sup> June 2019	100	A total 6,544 new water meters were installed for the new customer connection.
	(viii) To construct 1,875 water meter chambers.	30 <sup>th</sup> June 2019	100	Up to the end of June, 2019 Out of 1,875 meter chambers planned to be constructed during this period, a total of 655 water meter chambers were constructed.
	(ix) To install 15,000 Customer Water Meters into Meter chambers.	30 <sup>th</sup> June 2019	67	A total of 3,372 water meters installed into water meter chambers
	(x) To install 30,000 water meter seals.	30 <sup>th</sup> June 2019	100	A total of 17,522 new water meters seals installed.
	(xi) To remove Spaghetti pipelines of about 100 km at Unga Limited, Olmatejoo, Uswahilini, Baraa, Moshono.	30 <sup>th</sup> June 2019	63	Spaghetti pipeline of about 31.27km were removed during the FY 2018/19.
	(xii) Replacement and Installation of 30 valves and Valve Chambers in the distribution network (15 in 2018/19).	30 <sup>th</sup> June 2019	27	A total of 4 Valve replaced and installed at FFU Njiro 1, Nduruma 1, and TBL 2

S/N	Condition	Due Date	Compliance (%)	Implementation Status
5	(xi) Replace service line 233km.	30 <sup>th</sup> June 2019	12	A total of 8.731 Km of service line repaired and total construction of pipeline for network extension was 52.531Km for various pipes sizes ranging from 1" to 6" at different areas
	(xii) Replacement and Installation of 84 fire hydrants (24 each year).	30 <sup>th</sup> June 2019	0	Not implemented. However, 80 fire hydrants where installed as part of ongoing Arusha WSSA projects.
	(xiv) Replacement of Sewerage Maintenance equipment (power rodder - rodding machine) (all in 2018/19).	30 <sup>th</sup> June 2019	100	Power rodder – Rodding machine procured for the replacement of other maintenance equipment
	(xv) To install smart/digital 3000 pre-paid water meters.	30 <sup>th</sup> June 2019	27	During this period a total of smart/digital 135 pre-paid water meters was installed in the government institution and other big customer
	(xvi) Replacement of furniture and fittings.	30 <sup>th</sup> June 2019	100	A total of Tshs 15,861,920 spent on procurement of Nine (9) office and Kitchen chairs, twelve office and kitchen tables procured and two offices bench and 2 shelves installed
	(xvii) Replace 20 computers each year.	30 <sup>th</sup> June 2019	100	Office procured a total of 18 computer including desktops and laptops and one Digital camera with stand.
	(xviii) Replace 12 printers/photocopiers.	30 <sup>th</sup> June 2019	100	A total of 4 printers/photocopiers procured and four (4) UPS Smart VA procured
	<b>(e) Arusha WSSA shall attain key performance indicators as shown in the Third Schedule to this Order;</b>			
5	(i) 6000 New Connections (water).	30 <sup>th</sup> June 2019	100	7113 new water customers were connected
	(ii) 367 New Sewerage connection.	30 <sup>th</sup> June 2019	33	120 new sewerage customers were connected. However, a total of 250 customers are already connected through ongoing wastewater project the operation shall commence after completion of the project.
	(iii) 35% Non Revenue Water.	30 <sup>th</sup> June 2019	91	44.11% attained for FY2018/19 and verified during data verification conducted at the Utility
	(iv) 100% Metering ratio.	30 <sup>th</sup> June 2019	100	100% metering ratio
6	(v) 95% Revenue Collection efficiency (without arrears).	30 <sup>th</sup> June 2019	-	The Utility attained 112% collection efficiency. However, the reported collection figure includes arrears
	Arusha WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement.	30 <sup>th</sup> September 2019	100	The utility submitted the reports as recommended
7	Arusha WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	Ongoing	100	The Utility submitted all Majlis reports timely.
	<b>OVERALL COMPLIANCE (%)</b>		<b>65</b>	

#### A4.2.ii Dodoma WSSA (Tariff Order GN No 425 of 24th May 2019)

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1.	On or before 31st August 2019, Dodoma WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order;	30 June, 2019	70	The revised Business plan has been prepared, waiting for Board approval before being submitted to EWURA as per procedure
2.	Dodoma WSSA shall ensure that water meters for new customers are installed where it is accessible by the utility at a customer's premise; such as between 0.3m to 1m inside/ outside the front property boundary as well as between 0.3m and 0.6m from the left or right property boundary;	30 June, 2019	100	All customer water meters are fixed to the point where they are easily accessible by DUWASA workers for inspection and reading
3.	Dodoma WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the tariff order condition and each cost item of the revenue requirement as presented on the forth schedule	30 June, 2019	100	DUWASA is currently preparing annual report for 2018/2019 and will also include implementation of tariff orders
4.	Dodoma WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. Such information shall be used by EWURA to evaluate Dodoma WSSA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance or in evaluating the reasonableness of all future requests for tariff adjustment.	30 June, 2019	100	All reports are submitted on time
<b>OVERALL COMPLIANCE</b>			<b>93</b>	

#### A4.2.iii. Iringa WSSA (Tariff Order GN.No 350 of 26th April 2019)

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1	Replace 12 km of dilapidated pipes PVC Size DN 63mm -150mm at Kising'a, Nduli, Kihesa, Mkwawa, Mseke, Kalenga and Isakalilo	30 June, 2019	100%	8.4 km of dilapidated pipes PVC Size DN 63mm -150mm at Kising'a, Nduli, Kihesa, Mkwawa, Mseke, Kalenga and Isakalilo were replaced.
2	Replace 5,400 old meters at service area (1,800 meters per annum)	30 June, 2019	48	869 water meters replaced
	Acquire one new gas chlorination system for Ndiuka treatment plant	30 June, 2019	45	Contract between IRUWASA and the Consultant was signed on 27/03/2019. The design work has started.
	Acquire 03 standby float valves (one in each year).	30 June, 2019		01 standby float valve was acquired.
	Rehabilitate 3.6 km (DN 100mm - 150mm, PN6) of the dilapidated sewer Network network at Mlandege, Mvinjeni, Mkwawa, Ijala, and Makorongoni	30 June, 2019	0	Not yet Implemented
	Procure and install automatic meter reading system	30 June, 2019	0	Not yet implemented
	Install water level monitoring devices to 11 tanks	30 June, 2019	0	Not yet implemented
	Acquire and install 03 integrated software one for HR, store/procurement and Finance; one for Technical and one for Commercial operations management	30 June, 2019	100	Implementation of the condition is pending further directives from the Ministry of Finance and Planning through letter with ref No. MG. 233/261/01 'A' of 3rd June 2019, calling for discussion with regard to common software which is to be developed and used by all water authorities in Tanzania. The software is still under development stages. The expectation is to complete the software development by March 2020. The system will be able to accommodate all Authorities' key functionalities.
	Procure 40 computers for office use	30 June, 2019	25	Two (02) laptops and one (01) desktop computer procured during the financial year
	Procure and install two central printers	30 June, 2019	100	One center printer installed and is being used by all departments with no printers.

S/N	Condition	Due Date	Compliance (%)	Implementation Status
	Procure and install reliable internet network system	30 June, 2019	100	The reliable and point-to-point internet connection has been established
	Acquire 05 standby pumps for Kitwiru (50m <sup>3</sup> /h), Mtwila ( 50m <sup>3</sup> /h), two for Ndiuka raw water intake (460m <sup>3</sup> /hour each) and line B at treatment plant (242m <sup>3</sup> /h)	30 June, 2019	800	One (01) standby pumps for Kitwiru treatment (50m <sup>3</sup> /h) plant and three (03) Ndiuka pumps for raw water intake (460m <sup>3</sup> /hour each) acquired.
	Acquire 04 vehicles to support operations	30 June, 2019	0	Not yet implemented
	Acquire 15 new motorcycles	30 June, 2019	0	Not yet implemented
	Change lighting system to minimize power consumption	30 June, 2019	100	One (01) power source identified and the lighting system changed at Ndiuka Treatment Plant in order to minimize power consumption.
	<b>OVERALL COMPLIANCE (%)</b>		<b>50</b>	

#### A4.2.iv. Mbeya WSSA (Tariff Adjustment Order, GN. No 807 of 28th December, 2018 )

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1.	Mbeya WSSA shall implement the projects as detailed in Second Schedule by using funds generated from the approved tariffs	30 <sup>th</sup> June 2019	38	11 projects have not been implemented out of 29 planned. 6 are partly implemented
2.	Reduce Non Revenue Water to 26%	30 <sup>th</sup> June 2019	30	NRW was at 36.6%
3.	Increase Metering Ratio to 100%	30 <sup>th</sup> June 2019	100	Metering Ratio is at 100%
4.	Increase Revenue Collection efficiency (without arrears) to 97%	30 <sup>th</sup> June 2019	30	Collection efficiency is 98.5% including arrears
5.	Mbeya WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	30 <sup>th</sup> June 2019	100	Implemented
	<b>OVERALL COMPLIANCE</b>		<b>60</b>	

#### A4.2.v. Morogoro WSSA (Order No 16-013 of 1st June, 2016)

SN	Condition	Date due	Compliance (%)	Implementation Status
	Morogoro WSSA shall continue to provide EWURA with information about its financial and operating conditions in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate MORUWASA's performance in comparison with other WSSAs and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment.	Continuous	33.33%	Submitted all monthly Majlis progress reports, however only four reports were submitted on time.
	<b>OVERALL COMPLIANCE (%)</b>		<b>33.33</b>	

#### A4.2.vi. Moshi WSSA Tariff Order no 17-008 / Moshi WSSA (Provisional Tariff) Order, 2019

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1	MUWSA shall comply to the minimum quality of service targets which require them to ensure that all new connections are made within seven working days after a customer has settled all connections costs	Ongoing	100	New connections are made within seven working days after a customer has settled all connections costs.
2	On or before June 2018, MUWSA shall carry out replacement of aged pipes at Korongoni and Municipal center areas	30 <sup>th</sup> June 2018	100	The Authority has managed to carry out replacement of aged pipes as follows; at Municipal Town Centre areas (0.45 km), Majengo (0.45km), Bomambuzi (1.2km), Shiri Matunda (0.60km), Kaloleni (0.45km), Matindigani (0.2km) and Chekereni weruweru (0.186km).
3	On or before June 2018, MUWSA shall extend its sewerage network to Korongoni, Oysterbay, Dar - street, Soweto, Rau, Mfumuni and part of Majengo areas.	30 <sup>th</sup> June 2018	100	During this period of tariff order implementation, the Authority has managed to extend the sewerage network by 3.963km at Matindigani, Pasua, Bomambuzi, Bondeni, Mwenge, Longuo A, Rau, Soweto HH, Longuo B, Kiusa and Majengo. The implementation of extension of sewerage network was based on customer's demand.
4	<b>MUWSA shall implement projects as detailed in Second Schedule to this Order by using funds generated from the approved tariffs;</b>			
	<b>A. NEW INVESTMENT PROJECT</b>			
	(i) Construction of new water source at KWA JUMA SPRING.	30 <sup>th</sup> June 2018	100%	The Kwa Juma Spring source has not been developed as planned as the planned areas are currently receiving water from KCMC Boreholes
S/N	Condition	Due Date	Compliance (%)	Implementation Status
	(ii) Construct new 2.4km of pipeline at Soweto area.	30 <sup>th</sup> June 2018	25%	MUWSA managed to provide sufficient water supply to Soweto area by tapping water (0.6km) from newly constructed Karanga Spring Gravity main crossing Soweto area. The construction of Karanga spring water supply project was completed in December 2015. The fund allocated for construction of 2.4km was reallocated to extend water supply network to other priority areas.
	(iii) Construct new 20.4km of pipeline at Shantytown and Kariwa	30 <sup>th</sup> June 2018	100%	MUWSA constructed 28.846km (Kariwa area 2.166km, Mongoya area 4.35km, Uru Kaskazini & Uru kusini wards 17.83km and Rau 4.5km).
	(iv) Construct new 24.55km of pipeline at Bomambuzi, Mabogini and Shabaha	30 <sup>th</sup> June 2018	81	MUWSA extended a total of 19.816km at Mabogini and Bomambuzi wards as follows, 8.053km of pipeline at Shabaha, 5.25km of pipeline at Mpirani, 6.15 km of pipeline at Newland and 0.363km of pipeline at Bomambuzi.
	(v) Connect 6,000 new water customers	30 <sup>th</sup> June 2018	149	MUWSA connected 8,920 new customers. The achievement of the target was attributed by completion of Mang'ana water supply project, Kisumbe Water Project and Mweka Water Project. Supply of water to Uru wards, Mamba Kusini, Mweka and Mwika. Also extension of water supply projects to Mabogini, Kariwa, KDC and other parts of service area.
	(vi) Construct 1,350 water meter chambers	30 <sup>th</sup> June 2018	8	MUWSA managed to construct 114 precast water meter chambers by June 2018.
	(vii) Construct 250 surface boxes	30 <sup>th</sup> June 2018	0	The construction of surface boxes was not implemented.

S/N	Condition	Due Date	Compliance (%)	Implementation Status
	(viii) Construct 9.2km 6'-8' new sewer lines to cover parts of Kilimanjaro, Soweto, Nganga Mfumuni and Korongoni	30 <sup>th</sup> June 2018	76	MUWSA constructed 6.963 km of sewer network in different areas including: Matindigani (10" – 0.174km), Bondeni (10" – 0.424km), Longuo (10" – 2.5km), Pasua (6" – 1.125 km), Bomambuzi (6" – 0.72km), Bondeni (6" – 0.180km), Matindigani (6" – 0.060km), Majengo (6" – 0.042km), Mfumuni 6" 1.738km.
	(ix) Purchase of office equipment	30 <sup>th</sup> June 2018	100%	MUWSA purchased office equipments worth 11,869,560.00.
	(x) Procurement of 14 motor cycles	30 <sup>th</sup> June 2018	71	MUWSA has procured ten motor cycles worth 50.7 million.
	(xi) Laboratory Equipment	30 <sup>th</sup> June 2018	100	Purchase of laboratory equipment were postponed to next budget. However, the existing equipment's were calibrated to suit the purpose and other samples were analysed using the Ministry of Water and Irrigation laboratory.
	(xii) Water production equipment	30 <sup>th</sup> June 2018	100	MUWSA procured two complete submersible pumps for Mawenzi II and KCMC II also one motor and inventor system as standby power for water treatment facility was implemented.
	<b>B: REHABILITATION &amp; REPLACEMENT PROJECTS</b>			
	(i) Replace 22 km of pipeline at Mailisita, Msaranga, Chakereni and Sango	30 <sup>th</sup> June 2018	4	MUWSA replaced 0.772km of pipes at Mailisita, Msaranga and Chakereni
	(ii) Replace 14km of pipeline at Korongoni, Kiusa, Market, Matindigani, Msaranga and Mawenzi	30 <sup>th</sup> June 2018	19	MUWSA managed to replace 2.6km at Korongoni, Kiusa, Shiri Matunda, Kaloleni and Matindigani.
	(iii) Water meters replacement	30 <sup>th</sup> June 2018	100	MUWSA replaced 3,062 identified defect water meters.
	(iv) Replacement of workshop equipment	30 <sup>th</sup> June 2018	100	MUWSA procured Workshop equipment's including threading machine, welding transformer machine and welding generator machine that worth 20,196,405.
	(v) Replacement of aging furniture/equipment	30 <sup>th</sup> June 2018	100	MUWSA replaced furniture for Boardroom and offices which worth 49,641,900.
	(vi) Procurement of 9 motor vehicles	30 <sup>th</sup> June 2018	33	MUWSA procured one Land cruiser and two Suzuki worth 324 million.
	(vii) Purchase of data loggers	30 <sup>th</sup> June 2018	100	MUWSA opted to use android mobile phones instead of data loggers. 35 mobile phones have been procured and used for meter readings.
	(viii) Replacement of computer equipment and accessories	30 <sup>th</sup> June 2018	100	MUWSA procured 18 computer, 5 printers, 6 laptops, router, UPS and other accessories worth 125,515,213.00
5	MUWSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA in evaluating the reasonableness of all future requests for tariff adjustments.	Ongoing	100	MUWSA submitted all Majlis reports as required.
	<b>OVERALL COMPLIANCE (%)</b>		<b>78</b>	

#### A4.2.vii. Mtwara WSSA (Order GN No. 5 and 13)

SN	Condition	Date due	Compliance	REMARKS
	Mtwara WSSA shall submit a revised Business Plan that covers a period of 2018/19 – 2020/21 and incorporates the approved tariffs and action plan for implementation of conditions of this Order. The Plan shall include projects to be implemented in FY 2020/21 of TZS 1,090 million;	31 <sup>st</sup> March 2019	0.00%	Not complied. Mtwara WSSA did not submit the revised BP as required.
	Mtwara WSSA shall continue to cause her financial reports to be audited by a CAG or any authorized person as per section 33 (f) of the Public Audit Act and ensure that it submits copies of the audited financial statements to EWURA	31 <sup>st</sup> December 2019		The deadline is yet to be reached, therefore the condition is not included in the evaluation.
	Mtwara WSSA shall undertake valuation of their assets and submit to EWURA an Asset Valuation Report certified by a registered Valuer;	30 <sup>th</sup> June 2019	0.00%	Not complied. Mtwara WSSA did not submit an Asset Valuation Report as required.
	Mtwara WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement	30 <sup>th</sup> September 2019		The deadline for Annual Performance Report submission is on 30 <sup>th</sup> September 2019, therefore the condition is not included in the evaluation.
	Mtwara WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate Mtwara WSSA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment	30 <sup>th</sup> September 2019	91.67%	Submitted all monthly Majlis progress reports, however one report was not submitted on time.
	Mtwara WSSA shall implement the projects as detailed in Second Schedule of this order by using funds generated from the approved tariffs;	30 <sup>th</sup> June 2019	75.00%	In the FY 2018/19 Mtwara WSSA was required to implement and finish the Mbuo Project, other projects are to be completed at the end of the Tariff Order tenure in FY 2020/21. So far Mtwara WSSA has completed 28.5km of pipeline out of 29km as part of extension of network. Also, four boreholes have been drilled; one at Mbuo and three at Lweru, further 3,000 customer meters have been procured. Pending activities are procurement of submersible pumps for Lweru boreholes, procurement of laboratory equipment and installation of electricity for the boreholes.
	Mtwara WSSA shall attain key performance indicators as shown in Third Schedule of this order	30 <sup>th</sup> June 2019	69.00%	
	<b>OVERALL COMPLIANCE (%)</b>		<b>47.13%</b>	

#### A4.2.viii. Musoma WSSA (Order GN No. 7 of January 2019)

SN	Condition	Due date	Compliance (%)	Implementation status
1.	On or before 30 <sup>th</sup> April 2019, Musoma WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order	30 <sup>th</sup> April 2019	0	Not submitted
2.	On or before 30 <sup>th</sup> April 2019, Musoma WSSA shall submit to EWURA a plan on how to reduce NRW	30 <sup>th</sup> April 2019	0	Not submitted
3.	Musoma WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement	30 <sup>th</sup> Sept 2019	On progress	On progress
4.	Musoma WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate Musoma WSSA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment.	Continuous	100	Timely submitted
5.	<b>Replacement of Assets and New Investments</b> (Musoma WSSA shall implement the projects as detailed in the second schedule by using funds generated from the approved tariffs)			
5.1.	Replace 30 old and defective valves of size 100mm to 2525mm diameter by June 2019	30 <sup>th</sup> June 2019	0	Not implemented
5.2.	Install water meters to all customers by June 2019	30 <sup>th</sup> June 2019	0	Not implemented
5.3.	Purchase of 1 Computer and 1 Printer	30 <sup>th</sup> June 2018	100	Implemented
6.	<b>To attain the key performance indicator as indicated in the Third Schedule</b>			
6.1.	New Connections (water)	30 <sup>th</sup> June 2018	86.10	Actual implementation was 1,722 out of 2000 targeted number of customers
6.2.	Non-Revenue Water	30 <sup>th</sup> June 2018	100	Actual NRW was 62.19% as at 30 <sup>th</sup> June 2019. The performance target was 50%
6.3.	Metering Ratio	30 <sup>th</sup> June 2018	100	Actual performance in metering ratio is 77.50% as at 30 <sup>th</sup> June 2019. The performance target was 80%
6.4.	Revenue Collection efficiency	30 <sup>th</sup> June 2018	100	Actual Revenue Collection Efficiency was 94% as at 30 <sup>th</sup> June 2019. Performance target was 90%
6.5.	<b>OVERALL COMPLIANCE</b>		<b>62.3</b>	

#### A4.2.ix. Shinyanga WSSA (Order GN No. 16 of January 2019)

SN	Condition	Due date	Compliance (%)	Implementation Status
1.	On or before 30th April 2019, Shinyanga WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order	30 <sup>th</sup> April 2019	100	Timely submitted
2.	Shinyanga WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement;	30 <sup>th</sup> Sept 2019	100	
3.	Shinyanga WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate Shinyanga WSSA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment	On monthly basis	100	Monthly majls reports are timely submitted
4.	<b>New Investments</b> (Shinyanga WSSA shall implement the projects as detailed in the second schedule by using funds generated from the approved tariffs)			
4.1.	Replacement of 8 Bulk meters	30 <sup>th</sup> June 2019	100	Bulk waters have been replaced
5.	<b>To attain the key performance indicator as indicated in the Third Schedule</b>			
5.1.	New Connections (water)	30 <sup>th</sup> June 2019	100	Actual implementation was 1,472 out of 1,200 targeted number of customers
5.2.	Non-Revenue Water	30 <sup>th</sup> June 2019	100	Actual NRW was 13.25% as at 30 <sup>th</sup> June 2019. The performance target was 18%
5.3.	Metering Ratio	30 <sup>th</sup> June 2019	100	Actual performance in metering ratio is 100% as at 30 <sup>th</sup> June 2019. The performance target was 100%
5.4.	Revenue Collection efficiency	30 <sup>th</sup> June 2019	100	Actual Revenue Collection Efficiency was 91% as at 30 <sup>th</sup> June 2019. Performance target was 90% or above
<b>5.5.</b>	<b>OVERALL COMPLIANCE</b>		<b>100</b>	

### Songea WSSA (Tariff Order GN. No. 543 of 28th September 2018

S/N	Total Number of Conditions 8	Due date	Compliance (%)	Remarks
1.	On or before 31st January 2019 Songea WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order;	31 <sup>st</sup> January 2019	100	Submitted on 31 January 2019
2.	Songea WSSA shall implement the projects as detailed in Second Schedule by using funds generated from the approved tariffs	30 <sup>th</sup> June 2019	36	Two projects have been implemented as planned, three projects partially implemented and three were not implemented
3.	Increase New Connections (water) to 1,425	30 <sup>th</sup> June 2019	72	1030 customers were connected
4.	Reduce Non-Revenue Water to 22%	30 <sup>th</sup> June 2019	100	NRW was at 21%
5.	Increase Metering Ratio to 100%	30 <sup>th</sup> June 2019	99	Metering Ratio is at 99%
6.	Increase Revenue Collection efficiency (without arrears) to 90%	30 <sup>th</sup> June 2019	100	Collection efficiency is 98.2% including arrears
7.	Songea WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement	30 <sup>th</sup> June 2019	100	Implemented
8.	Songea WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	30 <sup>th</sup> June 2019	100	Implemented
	<b>Overall Compliance</b>		<b>88</b>	

### A4.2.x. Tabora WSSA (Tariff Order GN.No 41 of 24th May 2019

S/N	Condition	Due Date	Compliance (%)	Implementation Status
	Office Equipment – To procure a modern communication device with a capacity of recording incoming customer complaints, procure one projector and Public Awareness System.	30 June, 2019	0	Not yet Implemented
	Sewerage network project planning & Construction of grit removal chamber.	30 June, 2019	0	Not yet Implemented
	Pumps-Renewal & Replacement of existing assets of one Pump at Kazima with discharge of 120 cubic meters per hour at the head of 150m.	30 June, 2019	20	Under procurement process
	Overall Compliance		7	

#### A4.2.xi. Tanga WSSA (Tariff Adjustment for Water Supply and Sanitation Services) Order, 2018 of 1st October 2018

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1	On or before 31 <sup>st</sup> December 2018, submit to EWURA a revised Business Plan which shall comprise of an Investment Plan that takes into consideration that investments made from own funds generated from the approved tariff shall amount to TZS 4,892.15 million in 2018/19 and TZS 5,902.55 million in 2019/20.	31 <sup>st</sup> December 2018	100%	The Business Plan was submitted to EWURA by December, 2018
2	On or before 31 <sup>st</sup> December 2018, submit to EWURA an action plan for implementation of conditions of this Order	31 <sup>st</sup> December 2018	100%	The Action Plan for the implementation of the EWURA Tariff approval order was submitted by December, 2018
3	Attain the key performance indicator as indicated in the Third Schedule			
	(i) New Connections (water) 2000 nos	30 <sup>th</sup> June 2019	89%	The Utility managed to connect 1,783 new water customers out of 2000 recommended.
	(ii) New Connections (sewerage) 50 nos	30 <sup>th</sup> June 2019	64%	Tanga WSSA connected 32, new sewerage customers.
	(iii) 24.2% Non Revenue Water	30 <sup>th</sup> June 2019	96.13%	The Utility has 28.07% NRW
	(iii) 100% Metering ratio	30 <sup>th</sup> June 2019	100%	The Utility has 100% metering ratio.
	(iv) 95% Revenue Collection efficiency (without arrears)	30 <sup>th</sup> June 2019	100%	Tanga WSSA attain 96.68% as a collection efficiency
4	On annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition;	30 <sup>th</sup> September 2019	100%	The report with respect to implementation of the Tariff order for 2018/2019 was submitted alongside 2018/2019 Annual Report by 30 <sup>th</sup> September, 2019
5	Tanga WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	Ongoing	100%	Information is provided accordingly through MajiS reporting system (on a monthly basis).
	<b>OVERALL COMPLIANCE (%)</b>		<b>94%</b>	

#### A4.2.xii. Bukoba WSSA (Order No. 2015-005 of 30th April 2015)

No	Condition	Due date	Compliance (%)	Implementation status as at 30 <sup>th</sup> June 2019
1.	on or before 31st March 2019, Bukoba WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order;	31 <sup>st</sup> March 2019	100	Timely submitted
2.	Bukoba WSSA shall adhere to section 43 of EWURA Act, Cap 414 and the EWURA (Fees and Levies Collection Procedure) Rules, GN No. 193 of 2010	Monthly basis	100	Timely paid
3.	Bukoba WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement		On progress	On progress
4.	Bukoba WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate Bukoba WSSA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment	Monthly basis	90	10 out of 12 monthly mails reports were timely submitted
5.	<b>To attain the key performance indicator as indicated in the Third Schedule</b>			
5.1.	New Connections (water)	30 <sup>th</sup> June 2019	68.52	Actual implementation was 531 out of 775 targeted number of customers
5.2.	Non-Revenue Water	30 <sup>th</sup> June 2019	0	Actual NRW was 49.5% as at 30 <sup>th</sup> June 2019. The performance target was 40%
5.3.	Metering Ratio	30 <sup>th</sup> June 2019	100	Actual performance in metering ratio is 100% as at 30 <sup>th</sup> June 2019. The performance target was 100%
5.4.	Revenue Collection efficiency	30 <sup>th</sup> June 2019	100	Actual Revenue Collection Efficiency was 94% as at 30 <sup>th</sup> June 2019. Performance target was 95%
	<b>OVERALL COMPLIANCE (%)</b>		<b>82.3</b>	

#### A4.2.xiii. Kigoma WSSA (Order No. 2015-005 of 30th April 2015)

No	Condition	Due date	Compliance (%)	Implementation Status
1.	On or before 30 <sup>th</sup> June 2019, Kigoma WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order	30 <sup>th</sup> June 2019	0	Not submitted
2.	Kigoma WSSA shall adhere to the section 43 of the EWURA Act, Cap. 414 and rule 6 of the EWURA (Fees and Levies Collection Procedure) Rules, GN193 of 2010	Monthly basis	0	Not implemented
3.	<b>To attain the key performance indicator as indicated in the Third Schedule</b>			
3.1.	Proportion of population living	30 <sup>th</sup> June 2019	100	Actual proportion living was 72% out of 71% of the target
3.2.	Non-Revenue Water	30 <sup>th</sup> June 2019	100	Actual NRW was 28% as at 30 <sup>th</sup> June 2019. The performance target was 30%
3.3.	Metering Ratio	30 <sup>th</sup> June 2019	100	Actual performance in metering ratio is 79% as at 30 <sup>th</sup> June 2019. The performance target was 100%
3.4.	Revenue Collection efficiency	30 <sup>th</sup> June 2018	90.10	Actual Revenue Collection Efficiency was 82% as at 30 <sup>th</sup> June 2019. Performance target was 91%
	<b>OVERALL COMPLIANCE</b>		<b>65</b>	

#### A4.2.xiv. Singida WSSA ( Order GN No 542 of 28th September 2018)

SN	Condition	Date Due	Compliance (%)	Implementation Status
1.	Replacement of 210 dilapidated water meters by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
2.	Reconstruction of 12 defective valve chambers by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
3.	Replacement of dilapidated water pipes DN 90mm, 0.5km at Mitunduruni by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	60	To be completed by 30 <sup>th</sup> November, 2019
4.	Replace one control panel accessories for booster station Utemini	30 <sup>th</sup> June, 2019	100	Implemented
5.	Rehabilitation and replacement of two valves (DN 80&100) at Misuna	30 <sup>th</sup> June, 2019	100	Implemented
6.	Procure and install water meter testing bench	30 <sup>th</sup> June, 2019	30	To be completed by 30 <sup>th</sup> October, 2019
7.	Procure 7 bulk meters by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
8.	Procure and install 1431 new water meter by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
9.	Procure and install submersible pumps and motor rated 26kw at Mwankoko by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	97	To be completed by 30 <sup>th</sup> November, 2019
10.	Procure and install one standby surface pump rated 90kw at Kisaki	30 <sup>th</sup> June, 2019	0	To be implemented by 31 <sup>st</sup> December, 2019
11.	Procure heavy duty GS, 50m by June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
12.	Construction of 200 marker posts by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	87.5	To be completed by 30 <sup>th</sup> October, 2019
13.	Extension of water distribution network by 2.5km by 30 <sup>th</sup> June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
14.	Procure 6 motorcycles by June, 2019	30 <sup>th</sup> June, 2019	100	Implemented
15.	Procure six desktop/laptop computers and one TV	30 <sup>th</sup> June, 2019	100	Implemented
16.	Procure 100 smart water meters (prepaid)	30 <sup>th</sup> June, 2019	100	Implemented
	<b>OVERALL COMPLIANCE (%)</b>		<b>86</b>	

#### A4.2.xv. Sumbawanga WSSA (Tariff Order No. 2017-006)

SN	Condition	Date Due	Compliance (%)	Implementation Status
1.	Sumbawanga WSSA shall implement the projects as detailed in Second Schedule by using funds generated from the approved tariffs	30-Jun-19	20%	Four projects have not been reported, one has been implemented and one is partly implemented
2.	Increase 1,000 new water Connections	30-Jun-19	100%	1738 customers were connected
3.	Reduce Non Revenue Water to 28%	30-Jun-19	33%	NRW was at 31%
4.	Increase Metering Ratio to 100%	30-Jun-19	50%	Metering Ratio is at 88.9%
5.	Increase Revenue Collection efficiency (without arrears) to 90%	30-Jun-19	50%	Collection efficiency is 82% including arrears
6.	Sumbawanga WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	30-Jun-19	100%	Implemented
	<b>Overall Compliance</b>		<b>59%</b>	

#### A4.2.xvi. Babati WSSA (Tariff Adjustment for Water Supply and Sanitation Services ) Order, 2019 of 1st May 2018

S/N	Condition	Due Date	Compliance (%)	Implementation Status
1	On or before 31 <sup>st</sup> May 2019, Babati WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order.	31 <sup>st</sup> May 2019	100	Implemented as recommended
2	Babati WSSA shall implement the project s detailed in the second schedule by using funds generated from the approved tariffs;			
	<b>Rehabilitation and Replacement</b>			
	(i) Rehabilitation of Mrara, Old Majengo and Maisaka Water Network, Customer Connections and replacement of water meters	30 <sup>th</sup> June 2019	75	Rehabilitation at Mrara has started by uprooting the entire network and reconnect all customers and replace water meters for about 600 customers. The work is on Progress
	(ii) Procure and install 30 bulk meters	30 <sup>th</sup> June 2019	30	Three bulk meters have been procured and installed.
	(iii) Replace 3 pumps and 3 motors annually	30 <sup>th</sup> June 2019	33	Two motors has been procured and replaced at Maisaka BH 144 and at Nangara BH 141
	<b>New Investment</b>			
	(i) Procure and install meter reading system	30 <sup>th</sup> June 2019	40	Procurement of meter reading system has been completed, development is on progress.
	(ii) Procure and replace 4 motorcycles for Technicians	30 <sup>th</sup> June 2019	50	Two Motorcycles have been procured and replaced.
	(iii) Procure and Install call center and toll-free number	30 <sup>th</sup> June 2019	0	Not implemented.
	(iv) Procure and install 8 variable speed drivers at 8 boreholes	30 <sup>th</sup> June 2019	100	Two variable speed drivers has been procured and installed to two Boreholes
	(v) Procure and Install 2850 new customer meters	30 <sup>th</sup> June 2019	70	2000 Water were procured and installed for the year during the FY 2018/2019
	(vi) Construction of 5 toilets to 5 different pumping stations at Bagara Ziواني, Maisaka, Nangara, Kiongozi and Bonga	30 <sup>th</sup> June 2019	0	Not implemented.
	(vii) Establish hygiene education program to residents and stakeholders	30 <sup>th</sup> June 2019	0	Not implemented.
	(viii) Establish programs for customer awareness on bills payment	30 <sup>th</sup> June 2019	100	Awareness program are well enforced on bills payment.
	(ix) Procure 6 motorcycles for sales Assistants	30 <sup>th</sup> June 2019	100	Five new Motor cycles has been procured
	(x) Create a program to collect account receivables (by Installation of Prepaid Water Meters for Bad debtors)	30 <sup>th</sup> June 2019	0%	Pre paid water meters has not been installed to bad debtors but the Utility planned to start the exercise from October 2019 after delivery of 5000 water mters from Junaco Co. Ltd
	(xi) Integration of Billing System and GePG	30 <sup>th</sup> June 2019	100%	Intergration of billing system and GePG has been done.
	(xii) Procure and Install computerized Human Resource system	30 <sup>th</sup> June 2019	100%	Procurement and installation of computerized Human resource system has been done as directed.
	(xiii) Procure one standby server computer and 10 computers (5 for replacement and 5 new staff)	30 <sup>th</sup> June 2019	33%	Two computers has been procured during the FY 2018/19.

S/N	Condition	Due Date	Compliance (%)	Implementation Status
	(xiv) Procure staff working tools and safety gear	30 <sup>th</sup> June 2019	100%	Staff working tools has been procured.
	(xv) Develop own water quality testing lab.	30 <sup>th</sup> June 2019	100	Water quality testing lab has been developed as recommended.
3	Babati WSSA shall attain the Key performance indicators as shown in the Third Schedule of this Order			
	(i)100 New connection (water)	30 <sup>th</sup> June 2019	100	The utility managed to connect 1,308 new water connection.
	(ii) 35% Non - Revenue Water	30 <sup>th</sup> June 2019	96	The utility has 38.6% NRW
	(iii) 90% Revenue collection efficiency (without arrears)	30 <sup>th</sup> June 2019	97.86	The utility had a total Billing Value of tsh. 1,995,886,744.90 and a total collection of tsh. 1,913,519,966.82 where Current Collection=1,784,808,227.02 and Arrears=128,711,739.80 from July 2018 to 30 <sup>th</sup> June 2019.
4	Babati WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement.	Continuous	100	The report with respect to implementation of the Tariff order for 2018/2019 was submitted alongside 2018/2019 Annual Report by 30 <sup>th</sup> September, 2019
5	Babati WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA		100	The utility submitted all Majlis reports as required
	<b>OVERALL COMPLIANCE (%)</b>		<b>68</b>	

#### A4.2.xvii. Lindi WSSA (Tariff Adjustment Order, GN No 134)

Condition	Date due	Compliance	REMARKS
Lindi WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order	30 <sup>th</sup> April 2019	100.00%	Complied. Timely submitted the revised Business Plan as Ordered
Lindi WSSA shall conclude the process of preparation of Customer Service Charter;	31 <sup>st</sup> March 2019	50.00%	Late submission of the CSC
Lindi WSSA shall implement the projects as detailed in Second Schedule of this order by using funds generated from the approved tariffs;	30 <sup>th</sup> June 2019	90.00%	
Lindi WSSA shall attain key performance indicators as shown in Third Schedule of this order	30 <sup>th</sup> June 2019	55.50%	
<b>OVERALL COMPLIANCE (%)</b>		<b>73.88%</b>	

#### A4.2.i. Geita WSSA - Order No. 11-014 of 1st June, 2011

SN	Condition	Due date	Compliance (%)	Implementation status as at 30 <sup>th</sup> June 2019
1.	On or before 30 <sup>th</sup> June 2019, Geita WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order	30 <sup>th</sup> June 2019	0	Not submitted
2.	Geita WSSA shall cause their financial reports to be audited by a CAG or any authorized person as per section 33 (1) of the Public Audit Act and ensure that it submits copies of the audited financial statements to EWURA	30 <sup>th</sup> December 2019	0	Not submitted
3.	On or before 31 <sup>st</sup> Geita WSSA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement	30 <sup>th</sup> Sep 2019	100	On progress
4.	Geita WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate Geita WSSA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment	On monthly basis	100	Timely submitted
5.	<b>To attain the key performance indicator as indicated in the Third Schedule</b>			
5.1.	New Connections (water)	30 <sup>th</sup> June 2019	100	Actual implementation was 1,577 out of 1,400 targeted number of customers
5.2.	Non-Revenue Water	30 <sup>th</sup> June 2019	100	Actual NRW was 33.07% as at 30 <sup>th</sup> June 2018. The performance target was 23%
5.3.	Metering Ratio	30 <sup>th</sup> June 2019	100	Actual performance in metering ratio is 100% as at 30 <sup>th</sup> June 2018. The performance target was 100%
5.4.	Revenue Collection efficiency	30 <sup>th</sup> June 2019	100	Actual Revenue Collection Efficiency was 82% as at 30 <sup>th</sup> June 2018. Performance target was 80%
	<b>OVERALL COMPLIANCE</b>		<b>75</b>	

**COMPLIANCE WITH TARIFF  
CONDITIONS- NATIONAL PROJECT WSSAs**

#### A4.2.i. Chalinze WSSA- Order NO. 2016-007 of 29th February 2016

SN	Condition	Date due	Compliance (%)	Implementation Status
	Chalinze WSSA shall continue to provide EWURA with information about its financial and operating conditions in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate CHALINZASA's performance in comparison with other WSSAs and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment.	Continuous	25	Submitted all monthly Majlis progress reports, however only three reports were timely submitted.
	<b>OVERALL COMPLIANCE (%)</b>		<b>25</b>	

#### A4.2.ii. HTM WSSA Tariff Order No, 2018 of 1st May 2019

S/N	Condition	Deadline	Compliance (%)	Implementation Status
1	HTM WSSA shall attain key performance indicators as shown below: (i) 70% Non Revenue Water (ii) 90% Revenue collection efficiency (without arrears)	30 <sup>th</sup> June 2019 30 <sup>th</sup> June 2019	94.2 81	The Utility attained 75.84% NRW The Utility has 71% collection efficiency.
2	On or before 30 <sup>th</sup> June 2019, HTM WSSA shall ensure that HTM treatment plant is electrified	30 <sup>th</sup> June 2019	10	Preparation to procure a contractor for the activity is on going
3	HTM WSSA shall ensure it complies with the requirement of remitting regulatory levy	Ongoing	24	Regulatory levy demand notes of ten (10) months have been issued i.e demand note for July 2018 to February 2019 and for April 2019 and May 2019. Whereby demand note for March and June 2019 had not been delivered. Payment was done for only two months which is April and May while the rest of months was never done. A total of Tshs 1,122,246 was paid to EWURA out of Tshs 4,766,449.6 issued to the utility.
4	HTM WSSA shall on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition;	Ongoing	-	The report with respect to implementation of the Tariff order for 2018/2019 will be submitted alongside 2018/2019 Annual Report by 30 <sup>th</sup> September, 2019
5	HTM WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	Ongoing	100	Information is provided accordingly through Majlis reporting system (on a monthly basis).
	<b>OVERALL COMPLIANCE (%)</b>		<b>51.45</b>	

#### A4.2.iii.KASHWASA - Order NO. 12-018 of 29th February 2016

Condition	Due date	Compliance (%)	Implementation status
On or before 30 <sup>th</sup> April 2019, KASHWASA shall submit revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order	30 <sup>th</sup> April 2019	100	Timely submitted
KASHWASA shall submit, on semi - annual basis, progress on measures for reducing electricity costs for water production	Semi annually	0	Not submitted
KASHWASA shall, on annual basis as part of its annual performance report, submit to EWURA reports on the implementation of each of the Tariff Order condition and each cost item of the revenue requirement	30 <sup>th</sup> Sept 2019	100	continuous
KASHWASA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate KASHWASA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment	Continuous	100	Submitted as part of annual report as per required by the Tariff Order.
<b>OVERALL COMPLIANCE (%)</b>		<b>75</b>	

#### A4.2.iv. Makonde WSSA- Order NO. 2016-007 of 29th February 2016

Condition	Date due	Compliance (%)	Implementation Status
Makonde Plateau shall implement projects as detailed in the Second Schedule to this Order using funds generated from the approved tariff		0	
Makonde Plateau shall attain Key Performance Indicators as indicated in the Third Schedule to this Order		26	
Makonde Plateau WSSA shall adhere to the section 43 of EWURA Act, and section 6 of EWURA (Fees and levies collection procedures) Rules, GN no 193 of 2010	Continuous	0	Not complied
On or before 1 <sup>st</sup> April, 2019, Makonde Plateau WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan to implementation of conditions of this Order	1 <sup>st</sup> April, 2019	0	Not submitted
<b>OVERALL COMPLIANCE (%)</b>		<b>7</b>	

#### A4.2.v. MANAWASA - Order NO. 12-018 of 29th February 2016

Condition	Date due	Compliance (%)	Implementation Status
MANAWASA shall implement projects detailed in the Second Schedule by using funds generated from the approved tariffs	30 <sup>th</sup> June, 2019	80	Partially implemented
MANAWASA shall attain the key performance indicators as shown in Third Schedule of this Order	30 <sup>th</sup> June, 2019	63	Partially implemented
MANAWASA shall submit water quality test results every month starting from date of this order. The tests shall include among other parameters: residual chlorine and E. Coli in sampling points as indicated in Water Quality Monitoring Plan	Continuous	0	
MANAWASA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate MANAWASA's performance in comparison with other Water Supply and Sanitation Authorities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment	Continuous	50	Submitted all monthly Majlis progress reports, however six reports were late submitted.
<b>OVERALL COMPLIANCE (%)</b>		<b>48.2</b>	

#### A4.2.vi. MASWA WSSA - TARIFF ORDER GOVERNMENT NOTICE NO. 349 Published on 26th April 2019

Condition	Date due	Compliance (%)	Implementation Status
MASWA WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate MASWA WSSA's performance in comparison with other utilities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future tariff indexation.	Annually	91	Submitted all monthly Majlis progress reports; however one report were late submitted.
<b>OVERALL COMPLIANCE (%)</b>			<b>91</b>

#### A4.2.vii. MUGANGO – KIABAKARI WSSA - (Order No. 11 - 014 of 1st June, 2011)

<b>Total Number of Conditions 1</b>			
MUGANGO - KIABAKARI WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information will be used by EWURA to evaluate MUGANGO - KIABAKARI WSSA's performance in comparison with other utilities and the improvement of its performance over time. This evaluation will be considered by EWURA in evaluating the reasonableness of all future tariff indexation.	Annually	91	Submitted all monthly Majlis progress reports; however one report were late submitted.
<b>Overall Compliance</b>			<b>91</b>

#### A4.2.viii. WANGING'OMBE Order GN. 795 of 28th December 2018

Condition	Deadline	Compliance (%)	Implementation Status
Wanging'ombe WSSA shall implement the projects as detailed in Second Schedule by using funds generated from the approved tariffs	30 <sup>th</sup> June 2019	27	Most projects were not implemented. Five project were not implemented, four were partly implemented and only one project implemented completely
Reduce Non Revenue Water to 50%	30 <sup>th</sup> June 2019	0	NRW was at 64%
Increase Metering Ratio to 80%	30 <sup>th</sup> June 2019	100	Metering Ratio is at 87.2%
Increase Revenue Collection efficiency (without arrears) to 88%	30 <sup>th</sup> June 2019	0	Collection efficiency is 80.4% including arrears
On or before 28 February 2019 Wanging'ombe WSSA shall submit a revised Business Plan that incorporates the approved tariffs and action plan for implementation of conditions of this Order;	28-Feb-19	0	Revised Business Plan was not submitted
<b>OVERALL COMPLIANCE (%)</b>			<b>25</b>

**Table A4.3: Evaluation Criteria for Compliance with Tariff Order Conditions**

(1) For those conditions requiring submission of plans, and due date is within the reporting period but the actual implementation of the those conditions is beyond the reporting period. (Here the deadline considered is the date for submission of a plan)		
Submission of a plan in time		100%
Late submission of a plan		50%
(2) For those conditions requiring submission of plans and date due for their submissions is within the reporting period as well as the actual implementation of the conditions is also within the reporting period. (Here the deadline is the date set for implementation of a condition)		
Submission of plan in time		25%
Late submission		15%
Implementation of a plan (Full compliance).		75%
If it involves production of a document, that will need dissemination to the public, the 75% will be apportioned as follows:		
(a) Completion of developing and producing a working document		40%
(b) Dissemination, opinion collection and reviewing to make a final document for use		35%
(3) For conditions requiring submission of evidence for their implementation or requiring documents and others, with due date within the reporting period:		
Submission of the evidence. (Full compliance)		100%
Late submission of evidence		75%
(4) For the condition which involves implementation of an activity		
If fully implemented on time		100%
If implementation is ongoing		50%
If not implemented		0%
If fully implemented late		75%

**APPENDIX 5:**  
**COMPLIANCE WITH REMMITANCE OF**  
**REGULATORY LEVY FOR FY 2018/19**

**TABLE A5.1(a): COMPLIANCE WITH REMITTANCE OF REGULATORY LEVY FOR REGIONAL WSSAs DURING FY 2018/19**

NAME OF WSSA	CATEGORY	OPENING BALANCE 01 JULY 2018 (TZS)	ACTUAL INVOICES JULY 2018 TO JUNE 2019 (TZS)	AMOUNT RECEIVED UP TO AUGUST 2019 (TZS)	OUTSTANDING AMOUNT AS OF 30 AUGUST 2019 TZS	COMPLIANCE (%)
Arusha	A	2,234,222.02	148,345,372.11	124,912,406.71	25,667,187.42	83.0
DAWASA	A	1,294,601,747.85	1,066,478,778.68	1,995,082,952.12	365,997,574.41	84.5
Dodoma	A	-	152,735,472.12	152,735,472.12	9,528,538.54	100.0
Iringa	A	-	80,901,289.78	80,901,289.78	5,804,500.17	100.0
Kahama	A	1,693,176.25	63,625,568.12	64,308,932.11	1,009,812.26	98.5
Mbeya	A	33,538,284.69	126,043,057.49	134,245,449.03	25,335,893.15	84.1
Morogoro	A	149,116,761.76	109,021,835.33	57,000,000.00	201,138,597.09	22.1
Moshi	A	184,071,857.09	95,010,992.37	279,082,849.46	-	100.0
Mtwara	A	100,151,478.98	35,113,763.20	40,162,347.16	95,102,895.02	29.7
Musoma	A	168,745,831.61	36,538,118.01	7,931,590.20	197,352,359.42	3.9
Mwanza	A	316,343,432.70	243,383,060.54	225,188,327.40	334,538,165.84	40.2
Shinyanga	A	201,922,285.53	56,378,152.68	194,228,818.54	64,071,619.67	75.2
Songea	A	6,259,831.29	30,073,425.91	6,259,831.29	30,073,425.91	17.2
Tabora	A	230,434,190.31	54,909,692.03	31,191,823.77	254,152,058.57	10.9
Tanga	A	18,170,616.89	154,366,939.02	147,615,885.26	24,921,670.65	85.6
<b>Sub Total Category A</b>		<b>2,707,283,716.97</b>	<b>2,452,925,517.39</b>	<b>3,540,847,974.95</b>	<b>1,634,694,298.12</b>	<b>68.6</b>
Bukoba	B	68,786,126.40	17,257,747.48	74,032,002.00	12,011,871.88	86.0
Kigoma	B	129,197,391.23	21,131,814.58	3,750,198.57	146,579,007.24	2.5
Singida	B	92,044,931.20	33,068,298.14	49,657,427.37	75,455,801.97	39.7
Sumbawanga	B	15,975,300.65	16,000,849.85	22,556,379.94	9,419,770.56	70.5
Babati	C	22,358,477.37	22,409,948.34	37,021,356.92	77,47,068.79	82.7
Lindi	C	22,815,603.95	8,591,344.68	2,629,581.62	28,777,367.01	8.4
Geita	C	-	11,615,008.93	10,841,929.53	773,079.40	93.3
Bariadi	C	-	1,356,803.09	104,500.00	1,252,303.09	7.7
Mpanda	C	9,253,571.10	7,141,589.24	7,000,000.00	9,395,160.34	42.7
Njombe	C	3,845,986.92	9,822,420.52	9,473,774.68	4,194,632.76	69.3
Vwawa- Mlowo	C	-	696,508.30	100,000.00	596,508.30	14.4
<b>Sub Total Category B and C</b>		<b>364,277,388.82</b>	<b>149,092,333.15</b>	<b>217,167,150.63</b>	<b>296,202,571.34</b>	<b>42.3</b>
<b>GRAND TOTAL</b>		<b>3,071,561,105.79</b>	<b>2,602,017,850.54</b>	<b>3,758,015,125.58</b>	<b>1,930,896,869.46</b>	<b>66.2</b>

**TABLE A5.1(b) COMPLIANCE WITH REMITTANCE OF REGULATORY LEVY FOR NP WSSAs DURING FY 2018/19**

SN	NAME OF WATER UTILITY	OPENING BALANCE (TZS)	ACTUAL INVOICES (TZS)	AMOUNT RECEIVED (TZS)	OUTSTANDING AMOUNT (TZS)	SUBSEQUENTLY PAYMENT RECEIVED UP TO AUGUST 2019 IN TZS	OUTSTANDING BALANCE (TZS)	AMOUNT RECEIVED (TZS)	COMPLIANCE (%)
1	Chalinze	-	13,591,513.04	-	13,591,513.04	1,231,476.43	12,360,036.61	1,231,476.43	9%
2	HTM	-	5,168,054.20	-	5,168,054.20	1,122,246.20	4,045,808.00	1,122,246.20	22%
3	KASHWASA	-	70,573,643.20	45,790,298.00	24,783,345.20	13,364,199.20	11,419,146.00	59,154,497.20	84%
4	Makonde	-	1,484,542.90	-	1,484,542.90	-	1,484,542.90	-	0%
5	MANAWASA	4,181,454.51	29,677,228.35	18,511,666.82	15,347,016.04	8,663,653.25	6,683,362.79	27,175,320.07	92%
6	Maswa	-	2,747,189.77	-	2,747,189.77	-	2,747,189.77	-	0%
7	Mugango-Kiabakari	-	820,318.13	-	820,318.13	-	820,318.13	-	0%
8	Wanging'ombe	-	3,019,253.50	253,537.00	2,765,716.50	995,619.00	1,770,097.50	1,249,156.00	41%
	<b>Sub Total</b>	<b>4,181,454.51</b>	<b>127,081,743.09</b>	<b>64,555,501.82</b>	<b>66,707,695.78</b>	<b>25,377,194.08</b>	<b>41,330,501.70</b>	<b>89,932,695.90</b>	<b>71%</b>

**APPENDIX 6:  
SUMMARY OF IMPLEMENTATION OF  
THE RECOMMENDATIONS  
MADE IN THE FY 2017/18 REPORT**

## IMPLEMENTATION OF THE RECOMMENDATIONS MADE IN THE FY 2017/18 REPORT

SN	Key Issue	Observation	Recommendation	Responsible	Implementation Status
1	Protection of Water Sources	Only Moshi WSSAs is having water safety plan prepared in accordance with the MoW Guidelines for The Preparation of Water Safety Plans Resilient To Climate Change for Urban Water Supply Utilities, 2015	All WSSAs are required to ensure they prepare water safety plan prepared in accordance with the MoW Guidelines for The Preparation of Water Safety Plans Resilient To Climate Change for Urban Water Supply Utilities, 2015	Managing Directors of Regional and NP WSSAs	Apart from Moshi WSSA, still no WSSA prepared water safety plan prepared in accordance with the MoW Guidelines for The Preparation of Water Safety Plans Resilient To Climate Change for Urban Water Supply Utilities, 2015
2	Cost recovery	Most Regional and NP WSSAs are operating using tariffs that cannot recover their operations costs.	Regional and NP WSSAs have to ensure that they have up to date business plans. Further, WSSAs have to ensure that they regularly review the tariffs and improve operational efficiency.	Managing Directors of Regional, NP WSSAs and MoW	All Regional and NP WSSAs have approved and up to date Business plans except Bariadi WSSA. During the year under review tariff applications from 20 Regional WSSAs were approved.
3	High Non-Revenue Water (NRW)	It was observed that the overall NRW is still far from the service level benchmark of 20%. Only Kahama, Shinyanga and KASHWASA WSSAs were able to achieve the service level benchmark for NRW.	Regional WSSAs should implement strategies to ensure satisfactory pace of reduction trend of NRW. The NRW reduction strategies should be included in their business plans.	Managing Directors of Regional and NP WSSAs	All Regional and NP WSSAs have included NRW reduction strategies in their BP except Bariadi which does not have up to date Business Plan. There is no significant improvement on overall average NRW for Regional WSSAs. Overall average NRW for NP improved from 27% in 2017/18 to 24% in 2018/19.
4	Lack of sewerage systems.	Only 11 WSSAs out of 33 Regional and NP WSSAs have sewerage system.	Water Utilities should initiate and implement projects for extension of sewerage network.	Managing Directors of Regional and NP WSSAs Local Government Authorities	A total of 41.5km of sewerage network has been extended for all Regional WSSAs whereas 23.85 km has been extended by Dodoma WSSA, Arusha, Tabora, Sondea and Morogoro WSSAs have not extended their sewerage networks
5	Unreliable collection efficiency data	Out of 26 Regional and eight NP WSSAs, DAWASCO, Babati, Sumbawanga, Songea, Morogoro and Shinyanga WSSAs, have software capable of separating arrears from current bill collection using their billing software.	Water Utilities should ensure they have a mechanism that will enable separation of arrears from the collection from current bills	Managing Directors of Regional and NP WSSAs	Only five out of 26 Regional and eight NP WSSAs, have software capable of separating arrears from current bill. The WSSA are DAWASA, Babati, Songea, Morogoro and Shinyanga