THE UNITED REPUBLIC OF TANZANIA

ewura
Energy and Water Utilities Regulatory Authority

WATER UTILITIES PERFORMANCE REVIEW REPORT 2012/2013

REGIONAL WATER UTILITIES & DAWASCO

December 2013

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FOREWORD

Water Utilities Performance Report 2012/13: Regional Water Utilities and DAWASCO is the fifth report in a series of reports since 2008/09 that fulfils the requirement set in section 28(2) of the Water Supply and Sanitation Act, 2009. The report has been prepared by the Energy and Water Utilities Regulatory Authority (EWURA).

This report analyses the performance of Regional WSSAs and DAWASCO during the year 2012/13 in comparison to the previous two years. Unlike the previous four reports in which the performance of 19 Regional WSSAs and DAWASCO was discussed, the 2012/13 report constitutes the performance analysis and benchmarking of 23 Regional WSSAs and DAWASCO. This is consequent to the fact that during 2012/13 Geita, Mpanda, Bariadi and Njombe towns were declared by the Prime Minister's Office Regional Administration and Local Government (PMORALG) to be Regional Headquarters of the newly formed Regions of Geita, Katavi, Simiyu and Njombe respectively.

The report shows that most water utilities have shown improvement in metering ratio, number of water and sewerage connections, revenue collection, and staff per 1000 connections. However, the report unveils that management of Non-Revenue Water is still a challenge facing all water utilities. Also, the report shows that water and sewerage service coverage and reliability levels are still low and substantial investment is still required.

I would like to congratulate water utilities that have emerged as good performers in various performance indicators described in this report. I also congratulate those utilities that have shown performance improvement as compared to their performance during the year 2011/12. Generally, performance achieved by the water utilities in most performance indicators has not reached the recommended performance benchmarks.

Finally, I would like to thank the water utilities and the Ministry of Water for their input in making this report a success. It is my hope that this report will serve as a catalyst for water utilities to improve their performance.

Haruna Masebu

DIRECTOR GENERAL,

December, 2013

ABBREVIATIONS AND ACRONYMS

BOD_5	Biochemical Oxygen Demand of wastewater during decomposition over 5days period
COD	Chemical Oxygen Demand
DAWASCO	Dar es Salaam Water and Sewerage Corporation
DAWASA	Dar es Salaam Water and Sewerage Authority
DSNP	District, Small Towns and National Projects
EWURA	Energy and Water Utilities Regulatory Authority
KASHWASA	Kahama Shinyanga Water Supply Authority
MajIs	Water Utilities Information System Software
MoU	Memorandum of Understanding
MoW	Ministry of Water
NA/na	Not applicable
NBS	National Bureau of Statistics
NRW	Non-Revenue Water
pH	Potentiometric Hydrogen ion concentration - is a measure of the acidity or alkalinity of a solution
TBS	Tanzania Bureau of Standards
WSSA	Water Supply and Sanitation Authority
WSDP	Water Sector Development Program

Measurement Units and Symbols

km	kilometre
km^2	square kilometre
kWh/m^3	Kilowatt hours per cubic metre
m	metre
m^3	cubic metre
m^3/day	cubic metre per day
nr/km/year	number per kilometer per year
%	per cent
TZS	Tanzania Shillings

DEFINITIONS OF KEY PERFORMANCE INDICATORS

NO.	INDICATOR	DEFINITION	UNIT
WATER SUPPLY			
	Accounts Receivable	This is the money owed to water utilities by their customers expressed as 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.	months
	Administration costs per m^3 of water produced.	Total Administration costs (TZS) / total amount of water produced (m^3).	TZS/m^3
	Average hours of supply.	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
	Energy consumption	Energy consumption during the assessment period / Total amount of water produced (m^3).	kWh/m^3
	Mains failures	Number of mains (a pipe of diameter ≥ 2") failures leading into service interruption in a year / total mains length.	nr/km/year
	Metering Ratio	The percentage of number of water connections that have operating water meters to the total number of active water connections.	(%)
	Number of public water kiosks	Total number of active water kiosks at the end of the financial year.	Number
	Non-Revenue Water (NRW)	Is the amount of water that a water utility produces (or purchases from other 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%.	(%)
	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
	Overall Efficiency Indicator (OEI)	Is given as actual collection expressed as a percentage of the value of total water production. OEI= Collection Efficiency x (1-NRW)	(%)
	Personnel expenditure per m^3 of water produced.	Is the ratio of total personnel expenditures (TZS) to the total amount of water produced (m^3)	TZS/m^3
	Personnel expenditure as % of current collection from water and sewerage bills	Total personnel expenditures (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).	(%)
	Personnel/1000 (W&S) connections	This indicator measures the staffing level and is calculated as the ratio of total personnel to total water and sewerage connections.	personnel/ 1000 Connections
	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
	Proportion of population served with water	Is the percentage of population served to the total population living in the service area. The population served is arrived at 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 is multiplied by the average number of the population served by public stand posts and/or kiosks (iii) the number of population living in residential institutions, industrial and commercial complexes.	(%)
	Revenue Collection Efficiency	This indicator measures the ratio of collection to the billings during the year calculated as the Amount of Revenues Collected /Amount Billed x 100.	(%)
	Revenue per staff per year	Total Revenue per year / total number of staff.	TZS/Staff
	Treated water storage capacity	Total capacity of treated water storage (private storage tanks excluded) / average daily consumption x 24hours.	Hours
	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
	Water Mains rehabilitation	Length of mains (a pipe of diameter ≥ 2") rehabilitated during the year / total length of mains x 100.	(%)
	Water service connections rehabilitation	Number of service connections replaced or rehabilitated during the year / total number of connections x 100.	(%)
	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.	(%)
SEWERAGE			
1.	Proportion of population connected to the sewerage service	Is the percentage of population served with sewerage service to the total population living in the service area. The population served is arrived at 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 complexes that are connected with sewerage services.	(%)
	Sewer blockages	Number of sewer blockages in a year / total length of sewer network.	nr/km of sewers/ year
	Wastewater quality compliance	This indicator measures the % of the sewerage effluent samples that pass particular quality tests as per Tanzanian sewage quality standards: Total Number of Samples Passed / Total Number of Samples Tested).	(%)

EXECUTIVE SUMMARY

This is the fifth water utilities performance review report to be prepared by EWURA since 2008/09. Unlike the previous four reports in which the performance of 19 Regional WSSAs and DAWASCO was discussed, the 2012/13 report constitutes the performance analysis and benchmarking of 23 Regional WSSAs and DAWASCO. This is consequent to the fact that during 2012/13 Geita, Mpanda, Bariadi and Njombe towns were declared by the Prime Minister's Office Regional Administration and Local Government (PMORALG) to be Regional Headquarters of the newly formed Regions of Geita, Katavi, Simiyu and Njombe respectively.

Preparation of this report involved compilation, analysis and verification of data and information that was submitted by the Regional WSSAs and DAWASCO through monthly MajIs reports, annual performance reports, draft financial statements as wells as other reports submitted to EWURA in compliance with regulatory directives. The report shows that most Regional WSSAs have shown improvement in metering ratio, number of water and sewerage connections, revenue collection, working ratio and staff per 1000 connections. On the other hand, the report shows that for all water utilities, the overall increase in water demand has been higher than the overall increase in water production. The report also shows that the overall average service hours have declined as a result of insufficient water production. Further, Non-Revenue Water (NRW) has continued to be a challenge facing all Regional WSSAs and DAWASCO as none of the utilities has managed to achieve the recommended best practice of 20% or less. Furthermore, personnel costs as percentage of revenue collection for Regional WSSAs has been high above the 30% limit stipulated in the MoU between WSSAs and the Ministry of Water.

The report also shows the results of the performance assessment which has considered benchmarking of Regional WSSAs with best performance, Regional WSSAs' compliance with MoU performance targets and regulatory directives. Tanga WSSA has emerged the best performer in the provision of water supply services, while Moshi WSSA is the best performer in the provision of sewerage services. The least performer in the provision of water supply services is Lindi WSSA, while the least performer in the provision of sewerage services is Arusha WSSA.

In the end, the report shows that diminishing water sources, high NRW, low water service coverage and high personnel costs as key issues to be addressed. The corresponding recommendations and responsible institutions for addressing the key issues are also provided.

PERFORMANCE HIGHLIGHTS

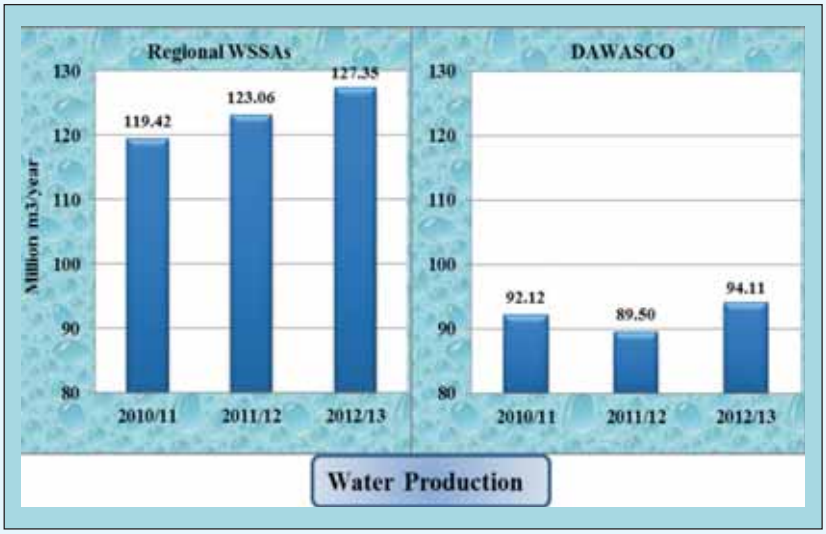
This section provides an overview of performance of Regional WSSAs and DAWASCO in the light of selected technical, business, commercial and financial performance indicators. The discussion intends to provide a summary of the performance of Regional WSSAs and DAWASCO over the past three years (2010/11 to 2012/13).

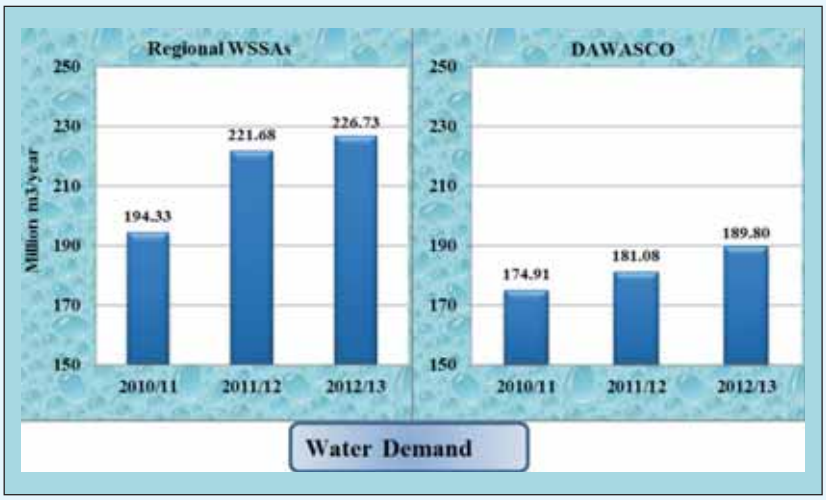
a) Insufficient Water Production

Over the three years period, total water production for Regional WSSAs increased from 119.42 million m^3 in 2010/11 to 127.35million m^3 in 2012/13.

While the increase in water production over the same period has been only 7%, the corresponding increase in water demand has been 16%. In addition, over the same period, production to demand ratio has never exceeded 61%.

On the other hand, DAWASCO's water production increased by only 2% over the three years period. It is also worth noting that DAWASCO's water production over the same period has not been more than 53% of water demand.



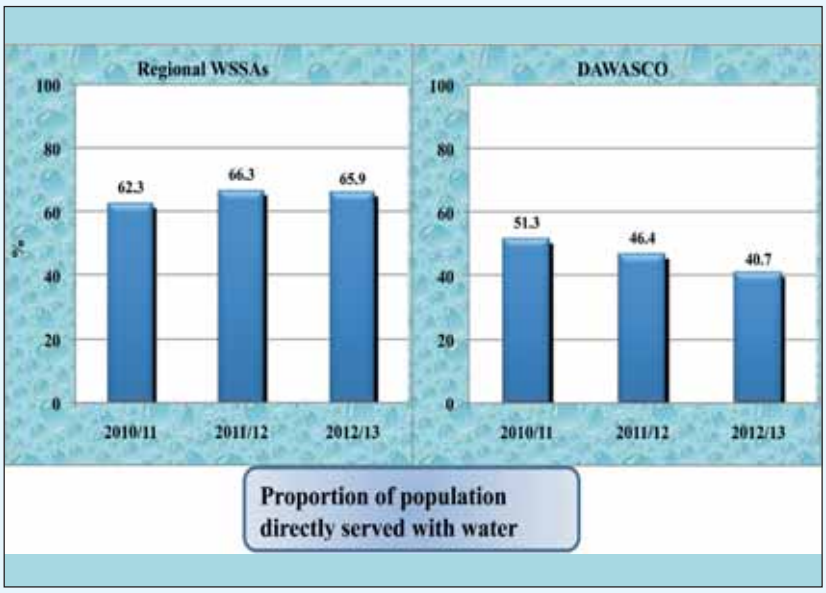


b) Decreasing water service coverage

Population directly served

Population directly served with water for Regional WSSAs experienced a fluctuating trend during the three years period whereby there has been an increase from an average of 62.3% in 2010/11 to 66.3% in 2011/12 and decreased to 65.9% in 2012/13.

The overall decrease in 2012/13 is a result of the review of population data as well as the low water service coverage in the utilities operating in the four new regional headquarters. During the reporting period, coverage figures have been computed based on the data from the 2012 population and housing census published by the National Bureau of Statistics (NBS).



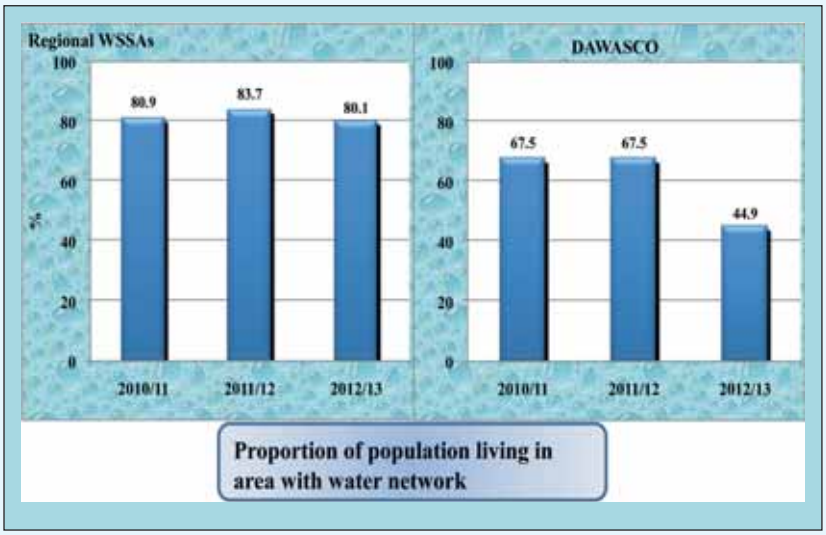
Review of population data has affected most of the WSSAs which reduced their coverage figures reported in 2011/12. Over the same period, the proportion of population directly served with water in DAWASCO operational area has decreased from 51.3% to 40.7% over the three year period.

DAWASCO's coverage decrease during 2012/13 is a result of review of population data as per 2012 Census results as well as a decrease in the number of water connections after removing from the database customers without water services.

Population living in area with Water Network

Population living in area with water network has also observed a fluctuating trend by increasing from 80.9% in 2010/11 to 83.7% in 2011/12 and decreasing to 80.1% in 2012/13 respectively.

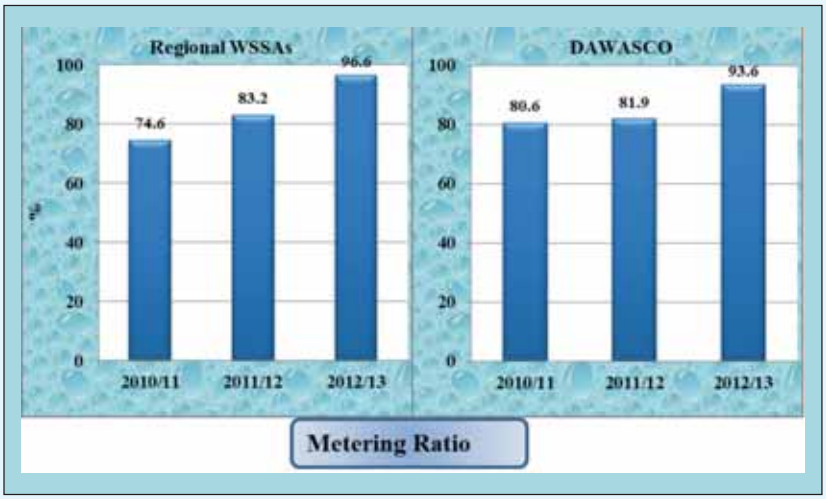
Similarly, this indicator was affected by the revised population data as well the low water service coverage figures in the four utilities operating in the four new regional headquarters.



Due to revision of total population data, the proportion of population living in area with water network has decreased in the WSSAs of Morogoro, Mtwara, Dodoma, Tabora, Songea, Shinyanga, Singida and Sumbawanga. In the DAWASCO's service area, the proportion of population living in area with water network has also decreased from 67.5% that was reported in 2010/11 and 2011/12 to 44.9% during the reporting period due to the revision of the population data.

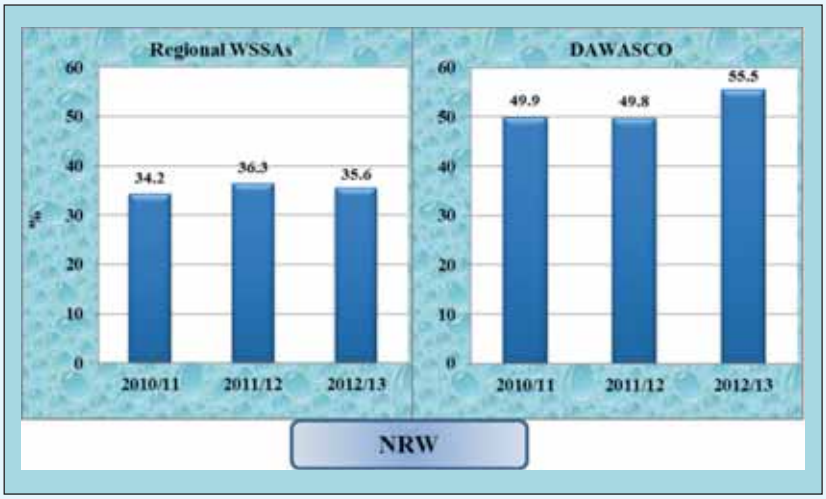
c) Increasing Metering Ratio

During the reporting period, metering ratio for Regional WSSAs based on the total water connections increased from 74.6% reported in 2010/11 to 91%, and from 80.6% to 87% for DAWASCO, over the same period. However, in this year's report metering ratio has been computed based on the active water connections instead of total connections as in the previous years. This was due to observation made by the water utilities that most of the inactive water customers remain un-operational for more than a year and whenever they become active, they are metered. In view of the foregoing, the average metering ratio for Regional WSSAs increased from 74.6% in 2010/11 to 96.6% in 2012/13 and for DAWASCO, metering ratio has also increased from 80.6% to 93.6% over the same period.



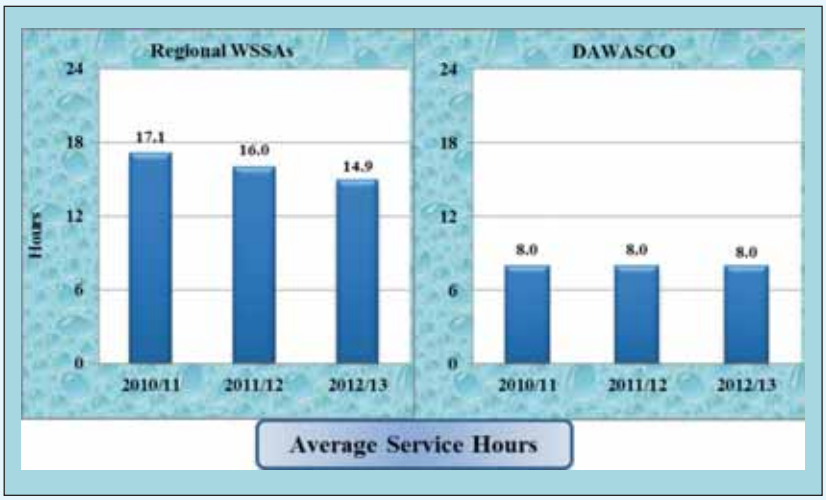
d) High Non-Revenue Water (NRW)

Generally, Non-Revenue Water (%) is still high compared to the recommended best practice of at most 20%. For regional WSSAs there has been a fluctuating trend whereby NRW has increased from 34.2% in 2010/11 to 36.3% in 2011/12 and thereafter observing a slight decrease to 35.6% in 2012/13. For DAWASCO, there was a slight improvement in NRW during 2011/12 but the situation has worsened in 2012/13 whereby NRW escalated from 49.8% in 2011/12 to 55.5%. So far, none of the water utilities has been able to reduce NRW to the recommended limit of 20%.



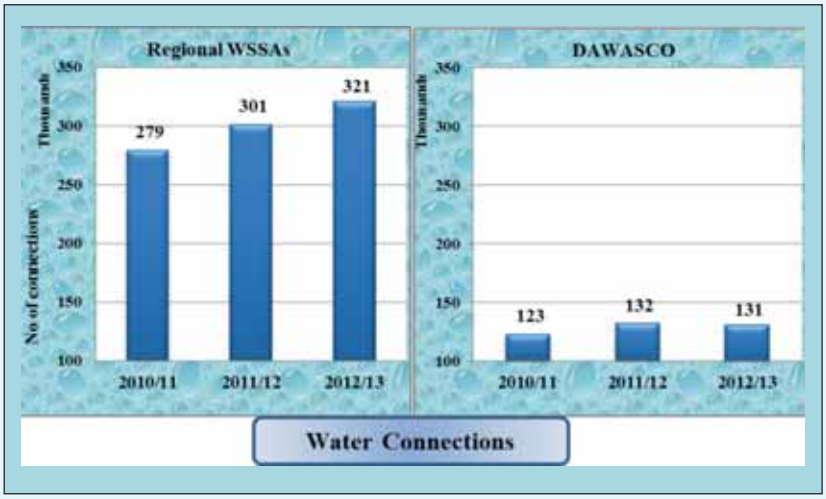
e) Decreasing Service Hours

There has been a continuous decrease in service hours for Regional WSSAs over the past three years. Overall average service hours have decreased from 17.1 in 2010/11 to 14.9 in 2012/13. In addition, the same indicator has not improved in the DAWASCO's service area as average hours of service remained at 8 since 2010/11. Nevertheless, in 2012/13 Iringa WSSA has reported 24 hours of water service availability, due to the utilization of the recently commissioned water production and distribution infrastructure.



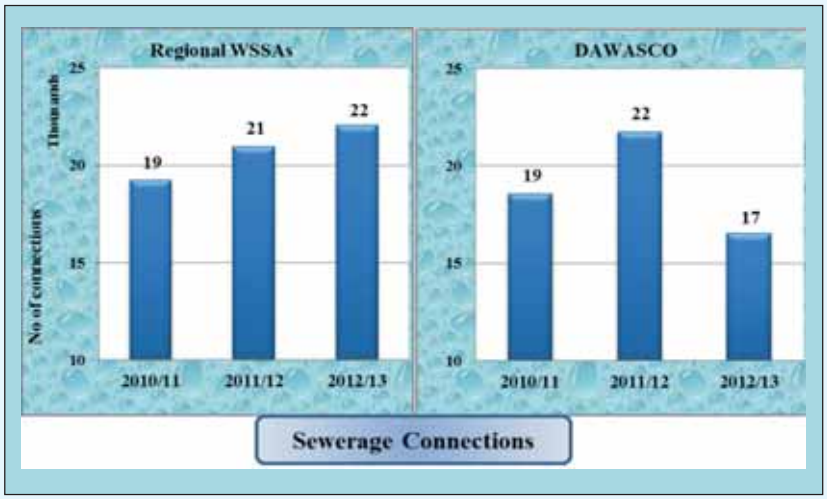
f) Increasing Water Connections

The total number of water connections for Regional WSSAs has increased from 279,413 in 2010/11 to 320,965 in 2012/13 which is equivalent to a 12% increase over the three years period. For DAWASCO, the trend of the total water connections has been fluctuating. During 2012/13 DAWASCO reported a reduction of about 1,124 water connections. DAWASCO clarified that this trend is a result of removal from the database customers who had no water services.



g) Increasing Sewerage Connections

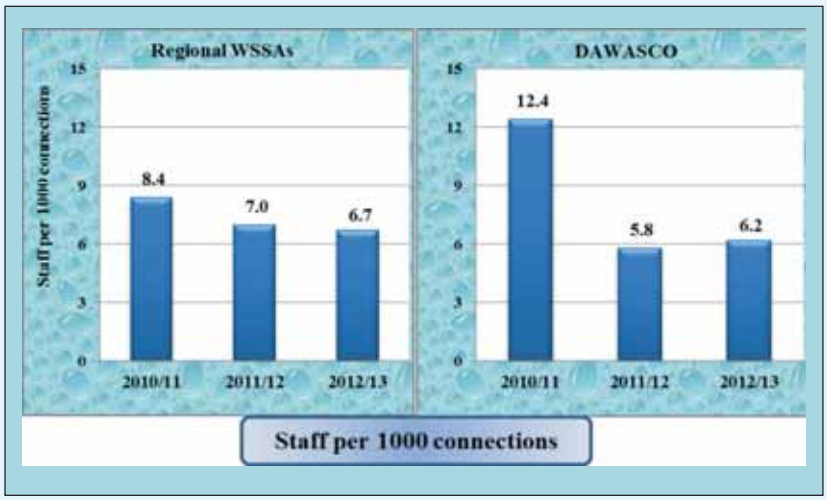
Only 10 Regional WSSAs provide sewerage services. The corresponding total number of sewerage connections has been increasing over three years and reached 22,055 in 2012/13 from 19,227 recorded in 2010/11. The pace of the increase in number of sewerage connections is equivalent to an annual increase of 943 connections which is approximately an average of 94 connections per utility per annum.



On the other hand, DAWASCO's total number of sewerage connections was reported to fluctuate. During 2012/13 there has been a 24% decrease from 21,742 in 2011/12 to 16,539 due to database cleanup and demolishing of buildings with sewerage connections.

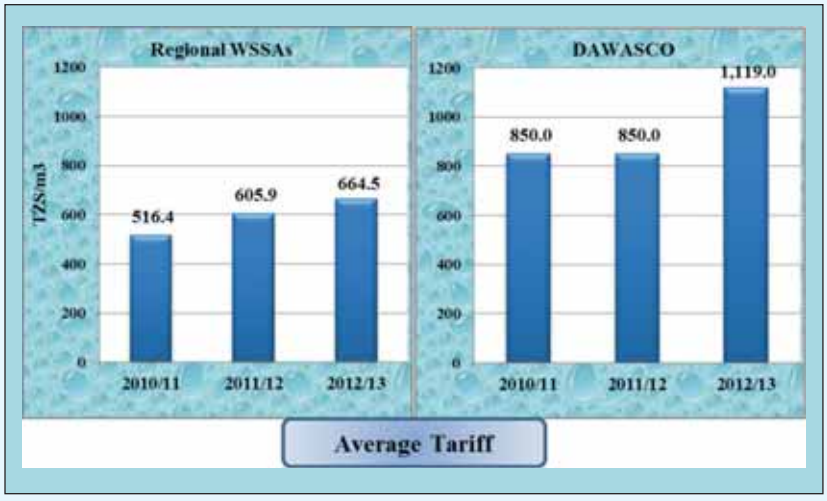
h) Improving Staff Productivity

For Regional WSSAs, Staff per 1000 total water and sewerage connections improved from an overall average of 8.4 in 2010/11 to 6.7 in 2012/13. For DAWASCO, staff per 1000 total water and sewerage connections improved from 12.4 in 2010/11 to 5.8 in 2011/12 but thereafter worsened to 6.2 in 2012/13. The increase in this ratio for DAWASCO is attributed to the increase in number of staff from 894 in 2011/12 to 943 in 2012/13 while the number of water and sewerage connections decreased during the same period.



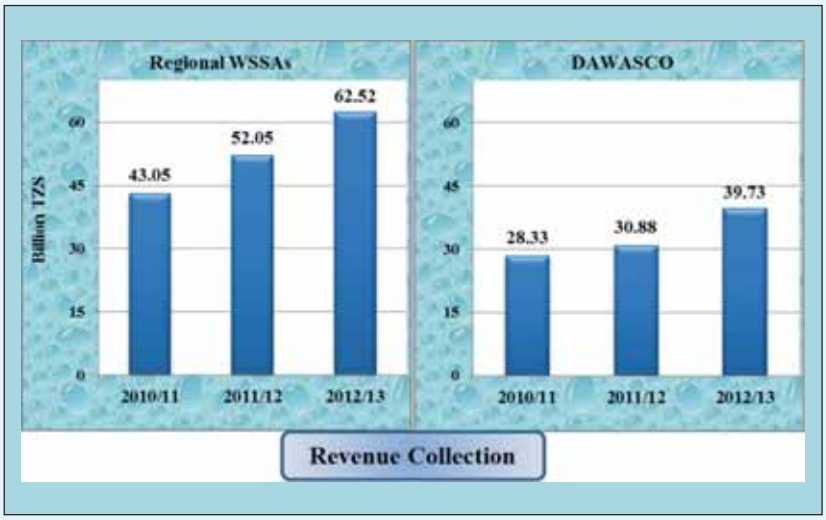
i) Increasing Average Water Tariff

Over the past three years, average water tariff approved by EWURA increased from TZS 516.4/m3 in 2010/11 to TZS 664.5/m3 in 2012/13. For DAWASCO, the average customer tariff increased from TZS 850/m3 in 2010/11 to TZS 1,119/m3 in 2012/13.



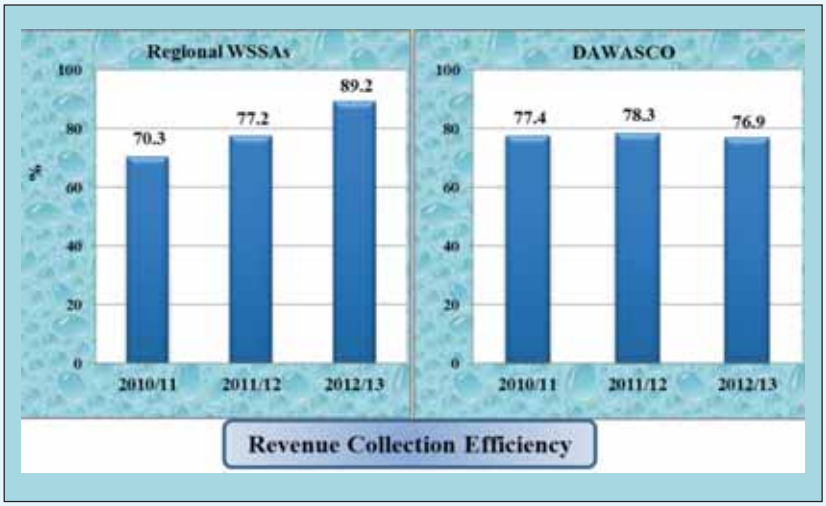
j) Increasing Revenue Collection

There has been a continuous increase in revenue collection from water supply and sewerage services over the past three years. For Regional WSSAs, revenue collection increased from TZS 43.05 billion in 2010/11 to TZS 62.52 billion in 2012/13 which is equivalent to a 45% increase. Similarly, DAWASCO's revenue collection increased by 40% from TZS 28.33 billion in 2010/11 to TZS 39.73 in 2012/13.



k) Improving Revenue Collection Efficiency

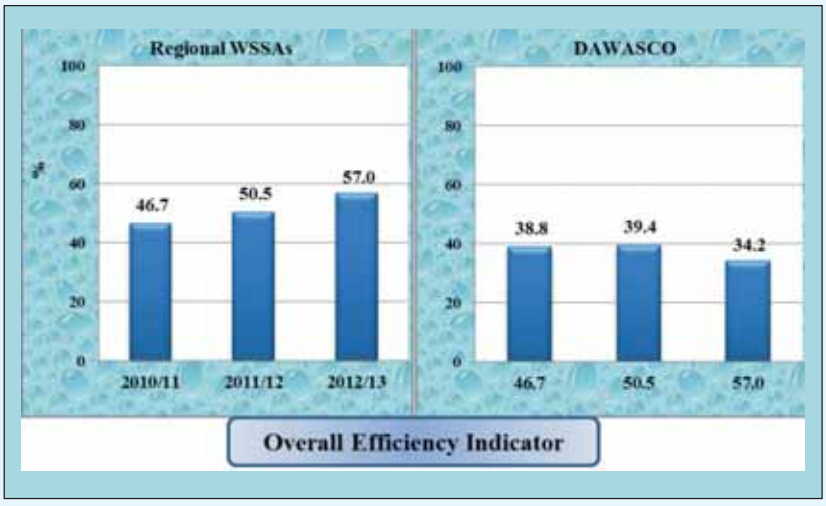
Revenue collection efficiency for Regional WSSAs has on average improved from 70.3% in 2010/11 to 89.2% in 2012/13 while for DAWASCO revenue collection efficiency improved from 77.4% in 2010/11 to 78.3% in 2011/12 and then decreased to 76.9% in 2012/13.



l) Low Overall Efficiency

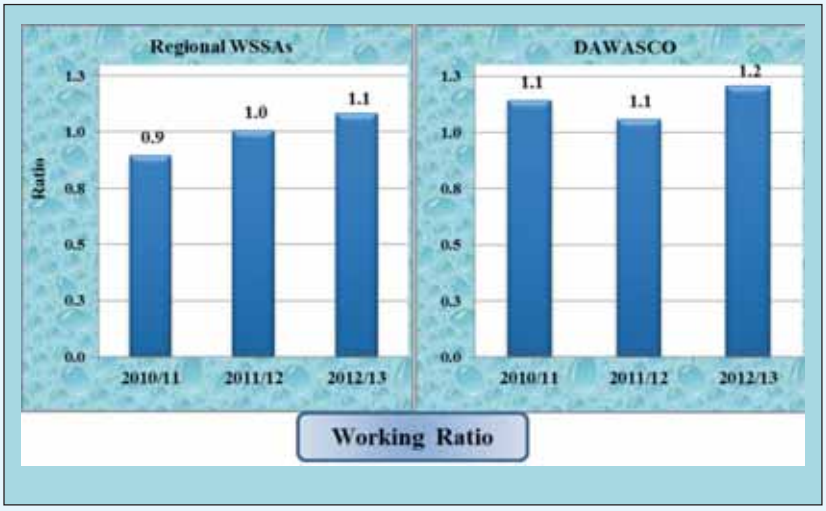
The Overall Efficiency Indicator (OEI) compares the volume of water for which the utility collects revenue to the total volume it produces. For the Regional WSSAs, OEI has improved from 46.7% in 2010/11 to 57% during the reporting period.

With regard to DAWASCO, there was a slight increase in OEI from 38.8% in 2010/11 to 39.4% in 2011/12 but thereafter declining to 34.2% in 2013/14 as the performance of both collection efficiency and non-revenue water worsened. The recommended OEI should be more than 76% by considering NRW of 20% and collection efficiency of 95%.



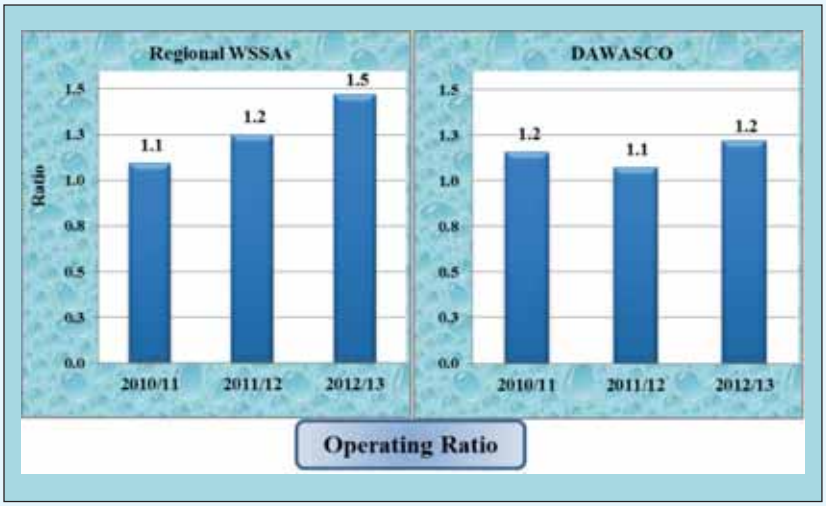
m) Deteriorating Working Ratio

This being a ratio of operational expenses to operational revenue which signifies the extent to which utilities have managed to cover operational expenses (excluding depreciation). For the past three years the performance in terms of working ratio has worsened in the Regional WSSAs with an increasing trend from 0.9 in 2010/11 to 1.1 in 2012/13. DAWASCO's working ratio has improved from 1.14 in 2010/11 to 1.06 in 2011/12 and deteriorated to 1.2 in 2012/13.



n) Deteriorating Operating Ratio

Operating ratio measures the extent of cost recovery of the water utilities. Operating ratio for Regional WSSAs has deteriorated over the past three years from 1.1 in 2010/11 to 1.4 in 2012/13. For DAWASCO, there has been an operating ratio improvement from 1.2 in 2010/11 to 1.1 in 2011/12 but thereafter declining to 1.2 in 2012/13.



o) DAWASCO's Compliance with Lease Performance Targets

DAWASCO is operating under the Lease Contract with DAWASA in which there are performance targets that are subject to financial penalties in cases of non-compliance. The overall evaluation of DAWASCO's performance in compliance with the targets shows that DAWASCO failed to comply with sewerage effluent quality, customer metering and reduction of water losses, which comprise 41% of the targets.

p) Compliance with Regulatory Directives and Requirements

Regulatory directives and requirements that were evaluated during the reporting period include reporting requirements, compliance with tariff conditions and compliance with the targets set on MoU between Regional WSSAs and the Ministry of Water.

Reporting obligations: It is the obligation of all utilities to submit their monthly reports electronically through a web-based software called MajIs by the 15th day of the following reporting month. Furthermore, utilities were required to submit draft Annual Reports and draft Financial Statements as of

30th September, 2013. All WSSAs submitted their monthly MajIs reports on time except DAWASCO, Songea WSSA, Lindi WSSA and the new Regional WSSAs. Only 6 Regional WSSAs managed to timely submit both of their draft reports; these are Arusha, Dodoma, Iringa, Shinyanga, Tanga and Babati WSSAs.

Tariff conditions compliance: Tariff approvals were accompanied by conditions which were supposed to be fulfilled by the water utilities. A total of 60 conditions ought to have been complied with by the utilities during the reported period. However, the average compliance to the tariff conditions were evaluated to be 59.4% having declined from 67% achieved in 2011/12. Low scores were mainly attributed to the late submission of the reports and delay to implement investment projects earmarked for implementation using own funds.

1.0 INTRODUCTION

1.1 Background

The Water Utilities Performance Review Report 2012/13 is the fifth in a series of such reports issued by EWURA. Unlike the previous four reports in which the performance of 19 Regional WSSAs and DAWASCO was discussed, the 2012/13 report constitutes the performance analysis and benchmarking of 23 Regional WSSAs and DAWASCO. This is consequent to the fact that during 2012/13 Geita, Mpanda, Bariadi and Njombe towns were declared by the Prime Minister's Office Regional Administration and Local Government (PMORALG) to be Regional Headquarters of the newly formed Regions of Geita, Katavi, Simiyu and Njombe respectively.

The service areas of these four utilities were previously District headquarters and were included in the previous performance reports for District, Small Towns and National Projects WSSAs. Therefore, in order to facilitate trend analysis, the 2010/11 and 2011/12 data were updated to include the performance of the four new Regional WSSAs. As a result, Regional WSSAs' average and total figures for the 2010/11 and 2011/12 that were reported in the previous performance reports were reinstated in this report to reflect the changes.

In this report, the performance of the 23 Regional WSSAs and DAWASCO is analyzed based on 25 performance indicators illustrated through charts and tables. For each performance indicator a brief commentary is provided to highlight trends, the overall and specific performance of the utilities as well as reasons for notable trends.

The commentary for DAWASCO is provided separately from the 23 Regional WSSAs because, while regional WSSAs operate under the Water Supply and Sanitation Act, 2009 (Cap 272), DAWASCO is operating under DAWASA Act, Cap 273. However, it has to be noted that the commentary is just a short explanation and is not intended to be a comprehensive description of every indicator.

This report is a mirror where utilities can identify their strengths and weaknesses as well as compare themselves with their peers within the country. Further, the report presents to the Ministry of Water (MoW), Development Partners and other stakeholders an overview of the current status of urban water supply and sewerage services in the country.

Furthermore, this report provides information and data pertinent to investment decisions in the sector. The report also offers an opportunity to customers of the respective water utilities to compare the performance of their service providers to those of other providers in the country and hence challenge them.

1.2 Description of Utilities

WSSAs are autonomous public water utilities established by the Water Supply and Sanitation Act, 2009. Distinctively, DAWASA was established by the DAWASA Act, Cap. 273. DAWASA is the owner of the assets for water supply and sewerage services in DAWASA designated area which include Dar es Salaam region and part of Kibaha and Bagamoyo Districts. It is responsible for planning, procurement and implementation of strategic capital works.

DAWASCO is a public corporation responsible for providing water supply and sewerage services in the DAWASA designated area through a lease contract. Regional WSSAs, DAWASA and DAWASCO possess Water Supply and Sewerage Licenses issued by EWURA. In addition, the Ministry of Water has graded WSSAs into three categories, namely Category **A**, **B** and **C** on the basis of their financial capabilities. Table 1.1 below provides a list of water utilities discussed in this report.

Table 1.1: List of Utilities included in the Report

SN	Name of Utility	Category	Services Provided	SN	Name of Utility	Category	Services Provided
1	Arusha	A	Water and Sewerage	13	Tabora	A	Water and Sewerage
2	DAWASCO	A	Water and Sewerage	14	Tanga	A	Water and Sewerage
3	Dodoma	A	Water and Sewerage	15	Bukoba	B	Water
4	Iringa	A	Water and Sewerage	16	Kigoma	B	Water
5	Mbeya	A	Water and Sewerage	17	Singida	B	Water
6	Morogoro	A	Water and Sewerage	18	Sumbawanga	B	Water
7	Moshi	A	Water and Sewerage	19	Babati	C	Water
8	Mtwara	A	Water	20	Lindi	C	Water
9	Musoma	A	Water	21	Bariadi	C	Water
10	Mwanza	A	Water and Sewerage	22	Geita	C	Water
11	Shinyanga	A	Water	23	Mpanda	C	Water
12	Songea	A	Water and Sewerage	24	Njombe	C	Water

Key to Category:

Category A: Water utilities that financially meet all their annual costs for Operation and Maintenance (O&M) including staff costs, energy costs and some contributions to investment.

Category B: Water utilities that financially meet their O&M costs and staffs cost including part of energy costs. These utilities receive Government subsidies to cover the remaining part of energy costs.

Category C: Water utilities that financially contribute to their O&M costs and receive Government subsidies to cover part of energy costs and staff costs.

1.3 Methodology

Preparation of this report involved compilation, analysis and verification of data and information. The data and information was submitted by the Regional WSSAs and DAWASCO through monthly MajIs reports, annual performance reports and draft financial statements. Other reports were submitted to EWURA in compliance with regulatory directives. The validity of the data and information used to prepare this report was checked through the following process:

a) Verifying the submitted data and information based on the data and information obtained from regular inspection;

b) 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; and

c) Inviting all Managing Directors/CEOs of Regional WSSAs, DAWASA and DAWASCO to a face to face workshop to discuss and confirm the data and information received prior to publication.

2.0 TECHNICAL OPERATIONS FOR WSSAs

This section makes technical analysis of the entire cycle of water and sewerage operations of the utility from water abstraction to sewerage disposal.

2.1 Water Abstraction

Boreholes, springs, dams, lakes and rivers are the major types of water sources for the Regional WSSAs. In 2012/13 the total water abstraction amounted to 133Million m^3 which is an increase of about 5% from 126Million m^3 abstracted in 2011/12 as shown in Appendix 2; Tables A2.1 (a) and Table A2.1 (b). Generally, there has been an increasing trend in the amount of water abstracted over the past three years. Most regional utilities have reported an increase in water abstraction mainly due to the completion of water projects which were on-going in various WSSAs.

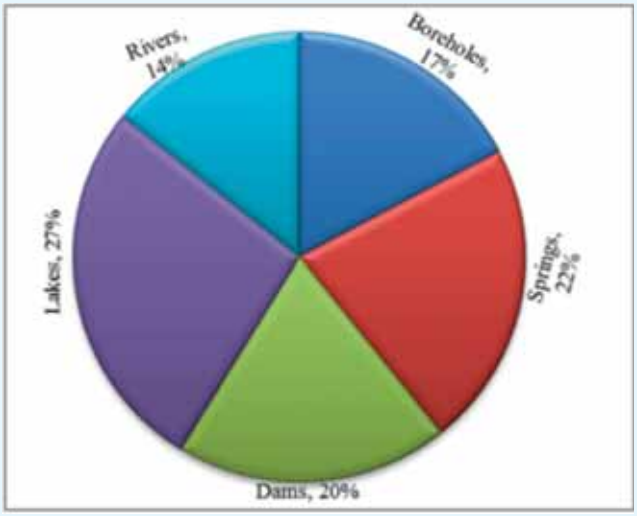


Figure 2.1: Water abstraction from different sources

During the reporting period, there was an increase in the amount of water abstraction from all types of water sources. Moreover, there has been a substantial increase in the amount of water abstracted from dams and rivers which increased by 13% and 14%, respectively. Nevertheless, abstraction from the lakes continued to be the main source of water supply in the Regional WSSAs, followed by springs and dams.

- ❖ The highest amount of water abstraction in all the Regional WSSAs was reported by Mwanza WSSA, while the lowest was reported by Geita WSSA.

- ❖ Morogoro WSSA reported the highest increase in the amount of water abstraction in 2012/13, while Mpanda WSSA reported the highest decrease. The decrease in water abstraction for Mpanda WSSA was due to electricity disconnection to their boreholes for about 2 months due to non-payment of electricity bills.

- ❖ During the period under review, DAWASCO abstracted 100.76Million m^3 of water from its sources which is almost the same amount as that reported in the previous year (i.e. 99.99mill m^3). DAWASCO continued to depend on Ruvu River as its main water source, which contributes about 95% of its total water abstraction. Details of the DAWASCO's water abstraction volumes and the three years' trends are presented in Appendix 2: Table A2.1b.

2.2 Installed Water Production Capacities

By the end of financial year 2012/13, the total installed water production capacity for the 23 Regional WSSAs was 204Million m^3. This is a slight increase of about 0.74% in the overall installed capacity compared to that reported in 2011/12. The detailed trend of installed water production capacities for all the WSSAs is shown in Appendix 2: Table A2.2.

- ❖ A decrease in installed water production capacity was reported by Arusha, Musoma and Kigoma WSSAs. Musoma and Kigoma WSSAs reported significant decreases in installed water production capacity of 41% and 33%, respectively and Arusha WSSA reported a slight

decrease of 2%. The significant decrease in installed water production capacity for Musoma WSSA was reported to be due to relocation of one of its water abstraction pumps to a booster station, while Kigoma WSSA reported a breakdown of one of its water abstraction pumps. The slight decrease for Arusha WSSA was due to the abandonment of some of its boreholes which dried up.

- ❖ During the reporting period, Babati, Lindi and Singida WSSAs reported a significant increase in their installed water production capacities as compared to the year 2011/12. Increase in installed water production capacity was 134% for Babati WSSA, 331% for Lindi WSSA and 111% for Singida WSSA. This increase is related to the completion of WSDP water projects in the respective utilities which included improvement of water production infrastructure.

- ❖ DAWASCO has maintained the total installed water production capacity at 102.1Million m^3 for the past three years.

2.3 Water Production

The total volume of water produced by the Regional WSSAs has continued to increase over the past three years as detailed in Appendix 2: Table A2.2. Water production by the Regional WSSAs increased by 3% from a total of 123Million m^3 reported in 2011/12 to 127Million m^3 during the reporting period. DAWASCO increased its water production during the year by 4.6Million m^3 which is about 5% increase of the previous year's water production. Figure 2.2 below gives a graphical presentation from the water production trend over the past three years for all the Regional WSSAs and DAWASCO.

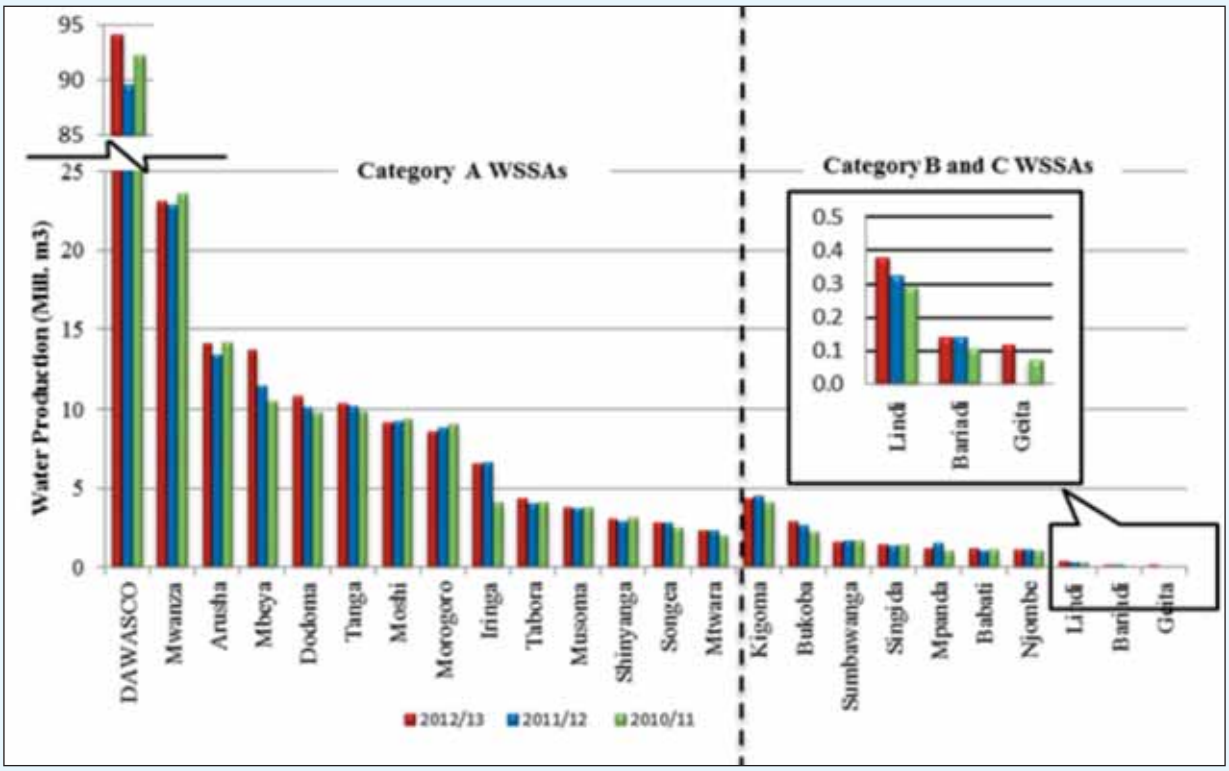


Figure 2.2: Annual Water Production Trend

- ❖ Most of the Regional WSSAs and DAWASCO reported an increase in water production. The highest increase in volume of water produced for Regional WSSAs was reported by Mbeya WSSA which contributed more than a half of the total increase in water production by the Regional WSSAs. An increase in water production by Mbeya WSSA is reported to be mainly due to effective utilitization of the available installed water production capacity to meet the city's water demand.

- Lindi WSSA also increased its water production significantly by 17% when compared to the previous year. This was attributed to the construction of two boreholes under WSDP.

- Other utilities which have substantially increased their water production during the reporting period and their percentage increase in brackets include WSSAs of Bukoba (10%), Babati (8%), Tabora (7%), Dodoma (7%), Shinyanga (6%), and Arusha (7%). Except for Shinyanga WSSA which increased its water production due to effective utilization of its installed water production capacity, the increase in water production in the remaining utilities was mainly due to completed water projects.

- It is worth noting that although there is an overall increase in water production during the reporting period, the overall water production for Category B&C utilities has slightly decreased. Mpanda WSSA recorded a significant decrease of 23% in its water production when compared to the previous year. The decrease in water production for Mpanda WSSA was due to electricity disconnection for about 2 months to its boreholes due to non-payment of electricity bills.

- Other utilities which recorded decrease in the volume of water produced in 2012/13 include Morogoro, Kigoma and Moshi WSSAs. The decrease in water production by Morogoro WSSA was due to review of the water production estimation following re-assessment of the water production pumps' capacities. For Kigoma WSSA, there was a breakdown in one of its water production pumps, and for Moshi WSSA there was a decline of water discharge from one of its spring sources. However, the decrease of water production in the aforementioned utilities is insignificant when compared to their annual volume of water production.

Table 2.1: DAWASCO's Water Production

Source	Annual Water Production (Million m3/year)		
	2010/11	**2011/12**	**2012/13**
Lower Ruvu	64.30	62.73	66.27
Upper Ruvu	24.82	23.00	23.83
Mtoni	1.55	1.93	2.18
Boreholes	1.44	1.83	1.83
TOTAL	**92.12**	**89.50**	**94.11**

- DAWASCO continued to depend mainly on its Lower Ruvu source. Table 2.1 shows the three years' trend of DAWASCO's water production from its four production plants. It is worth noting that during the year under review, DAWASCO has increased the volume of its water production despite the fact that the installed water production capacity is almost the same as in the previous year.

2.4 Water Demand

During the year 2012/13, the total water demand for 23 Regional WSSAs was 226.7Million m^3. The detailed trend for the WSSAs' water demand is as presented in Appendix 2: Table A2.2.

- The total water demand for the Regional WSSAs is estimated to have increased by 2% when compared to the previous year's water demand. Most of the Regional WSSAs have revised their water demand data to be consistent with the population census data.

- Njombe WSSA did not review its water demand for 2012/13.

- During the reporting year, DAWASCO reported an annual water demand of 189.8million m^3, which increased from 181million m^3 reported in the previous year.

2.4.1 Comparison of Water Demand, Installed Capacity and Water Production

Water demands in most of the Regional WSSAs and DAWASCO surpass their installed water production capacity as well as their actual water production. Also, neither of the Regional WSSAs nor DAWASCO has been able to fully utilize the available water production capacity. Also none of the utility has been able to fully satisfy the water demand of their respective service areas during the reporting year. The total water produced by the Regional WSSAs was enough to cater for only 56% of the total water demand, whereby only 63% of the total installed water production capacity was utilized. Even if the total installed water production capacity could have been fully utilized by the Regional WSSAs, it could only be able to cater for 90% of the total water demand.

For the case of DAWASCO, a similar trend was observed. About 92% of the installed water production capacity was utilized by DAWASCO, which was sufficient to cater for only 50% of the water demand. These observations show that Regional WSSAs as well as DAWASCO need to have professional investment planning and monitoring development of water infrastructure. Figure 2.3 below gives a graphical presentation of the comparison between the water production, demand and installed water production capacity for the Regional WSSAs and DAWASCO.

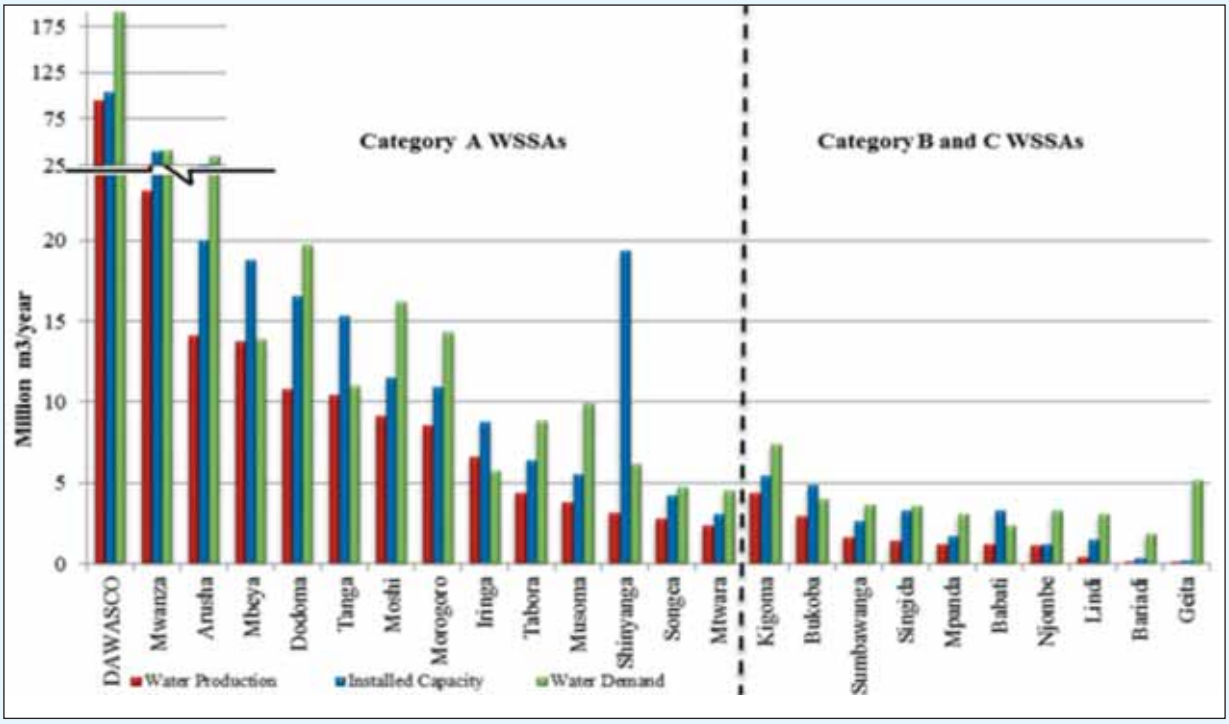


Figure 2.3: Comparison of Water Demand, Installed Capacity and Water Production

- ❖ Installed water production capacity for Mbeya, Tanga, Iringa, Shinyanga, Bukoba, and Babati WSSAs is higher than their water demand. These utilities need to focus on network expansion in order to utilize the available capacities.

- ❖ Shinyanga WSSA's installed water production capacity has included the total production capacity from its own water source (the Ning'hwa dam) and the bulk water purchase from the Kahama-Shinyanga Water Supply Authority (KASHWASA).

2.5 Utilization of Water Supply Networks

Water supply network utilization is assessed in terms of number of connections in a kilometer length of the distribution network. During the reporting period, Regional WSSAs had an average of 52 water connections in a kilometer length of the water network, decreasing from an average of 56 connections per kilometer reported in 2011/12. For DAWASCO, the average water connections

density decreased from 51 connections per kilometer reported in 2011/12 to 50 connections per kilometer in 2012/13. The detailed trends of water connection density for Regional WSSAs and DAWASCO are presented in Appendix 2: Table A2.3 and illustrated in Figure 2.4 below.

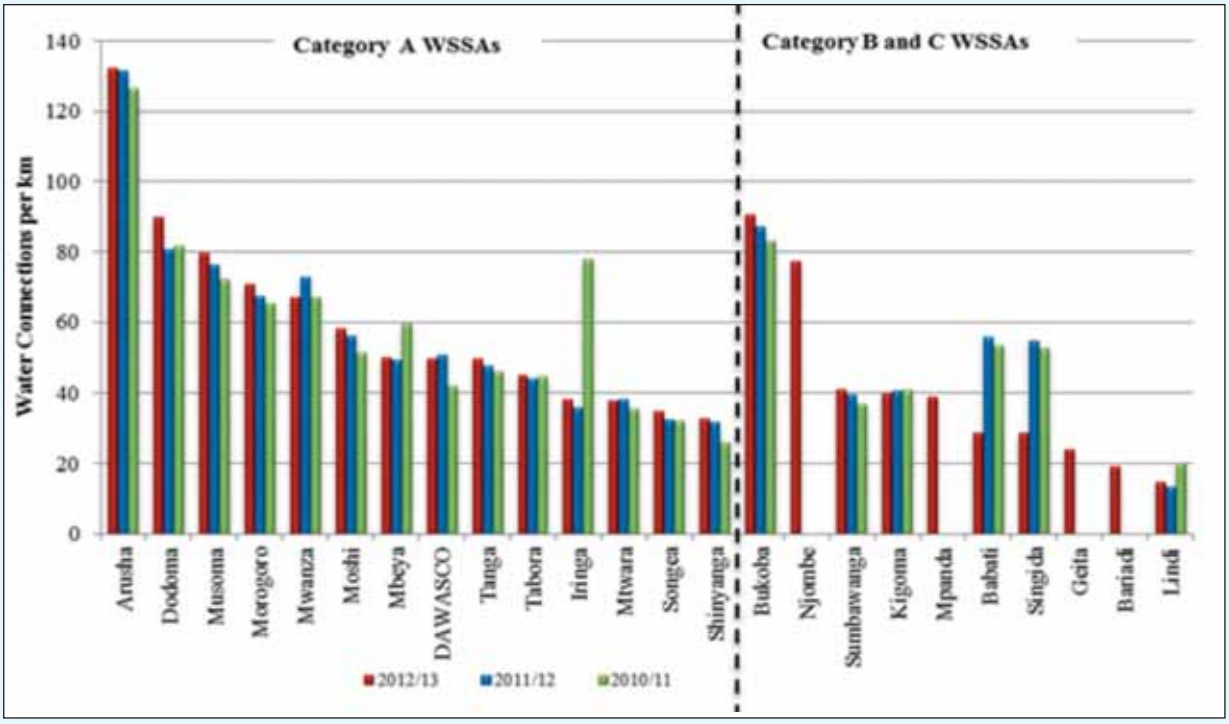


Figure 2.4: Number of Water Connection per Km Length of Distribution Pipeline

- ❖ Arusha WSSA continued to have the highest water connection density in a kilometer of the water distribution network with 132 connections per kilometer of water distribution network. Meanwhile, Lindi WSSA remained with the lowest reported water connections density of 15 connections per kilometre.

- ❖ The significant drop in water connections density that was observed in Iringa during 2011/12 was due to the substantial increase in water distribution network following implementation of the water supply improvement project in the area.

- ❖ Babati WSSA recorded the highest decrease in its water connection density from 55.9 to 29.1 connections per km, Dodoma WSSA had the highest increase from 80.7 to 90.1 connections per km. While the increase observed in Babati WSSA was due to an increase in length of the distribution network, the decrease observed in Dodoma WSSA was due to substantial increase in number of water connections.

- ❖ DAWASCO had its water connection density decreasing from 50.8 connections per kilometer in 2011/12 to 49.7 connections per kilometer in 2012/13. This decrease is mainly due to the increase in network length by 31.9km and the decrease in number of water connections by 1,124 connections.

2.6 Water Mains Rehabilitation

This performance indicator has always been reported with irregular trend and most WSSAs have been reporting very low water mains rehabilitation. The major reasons for this is that the water mains rehabilitation requires huge amount of investment which most utilities cannot afford using their own financial resources. Therefore, in most cases, mains rehabilitation is only reported by those utilities with externally financed water projects. During the reporting year, an average of only 1.5% of the total length of the water mains was rehabilitated by the Regional WSSAs. Previously, in

2011/12, Regional WSSAs rehabilitated 2.8% of the water mains. DAWASCO, on the other hand, did not report any rehabilitation during the reporting year. In 2011/12, DAWASCO reported to have rehabilitated 1.1% of its water mains. The detailed trends of the water mains rehabilitation over the past three years for Regional WSSAs and DAWASCO is as presented in Appendix 2: Table A2.19 and illustrated in Figure 2.5 below.

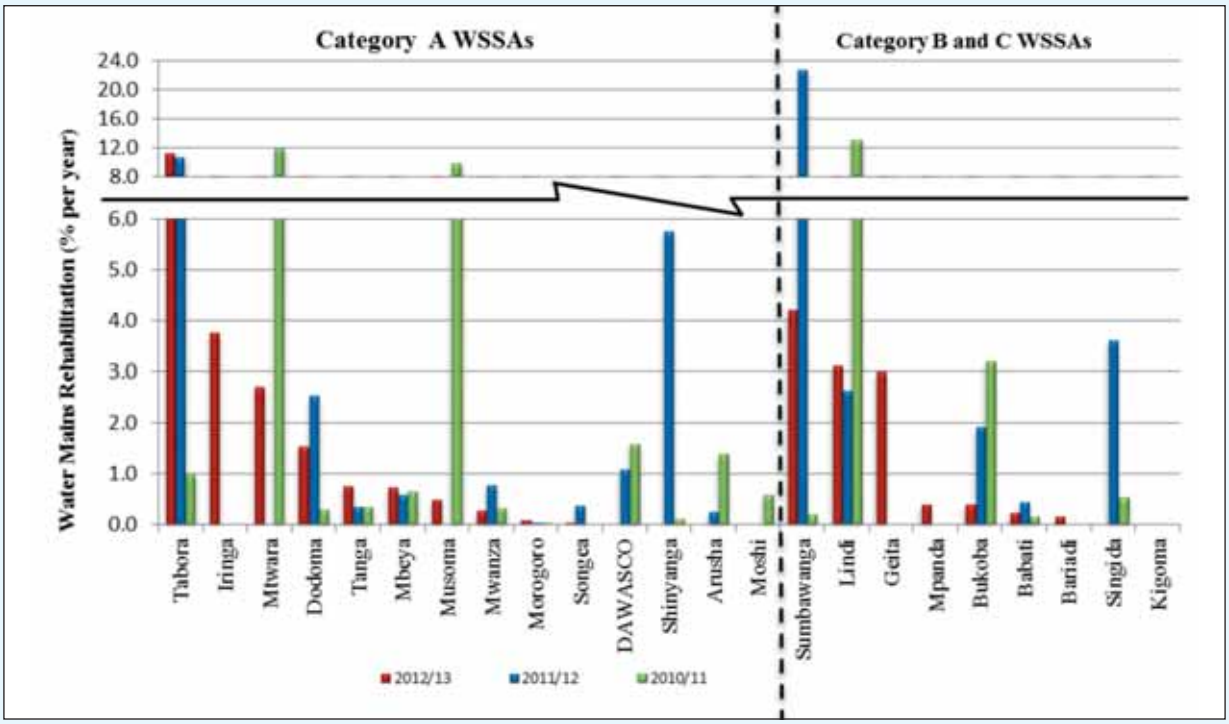


Figure 2.5: Water Mains Rehabilitation

❖ While most of the Regional WSSAs reported very low values of percentage of water mains rehabilitation, Tabora, Sumbawanga, Iringa, Mtwara, Lindi and Geita WSSAs recorded significant values of water mains rehabilitation mainly due to the water supply projects that were implemented in those utilities.

2.7 Rehabilitation of Water Service Connection

During the reporting period, Regional WSSAs have reported an increase in percentage of water service connections rehabilitated from 2.8% recorded in 2011/12 to 5.5%. Meanwhile, DAWASCO reported to have rehabilitated 10.9% of its water service connections during the reporting period, slightly increasing from 10.2% reported in 2011/12. It was reported that most of the water service connections rehabilitation was done by the respective utilities aimed at replacing poor quality pipes that were used by the customers to connect water to their premises. The details of the water service connections over the past three years for Regional WSSAs and DAWASCO are shown in Appendix 2: Table A2.19 and illustrated in Figure 2.6 below.

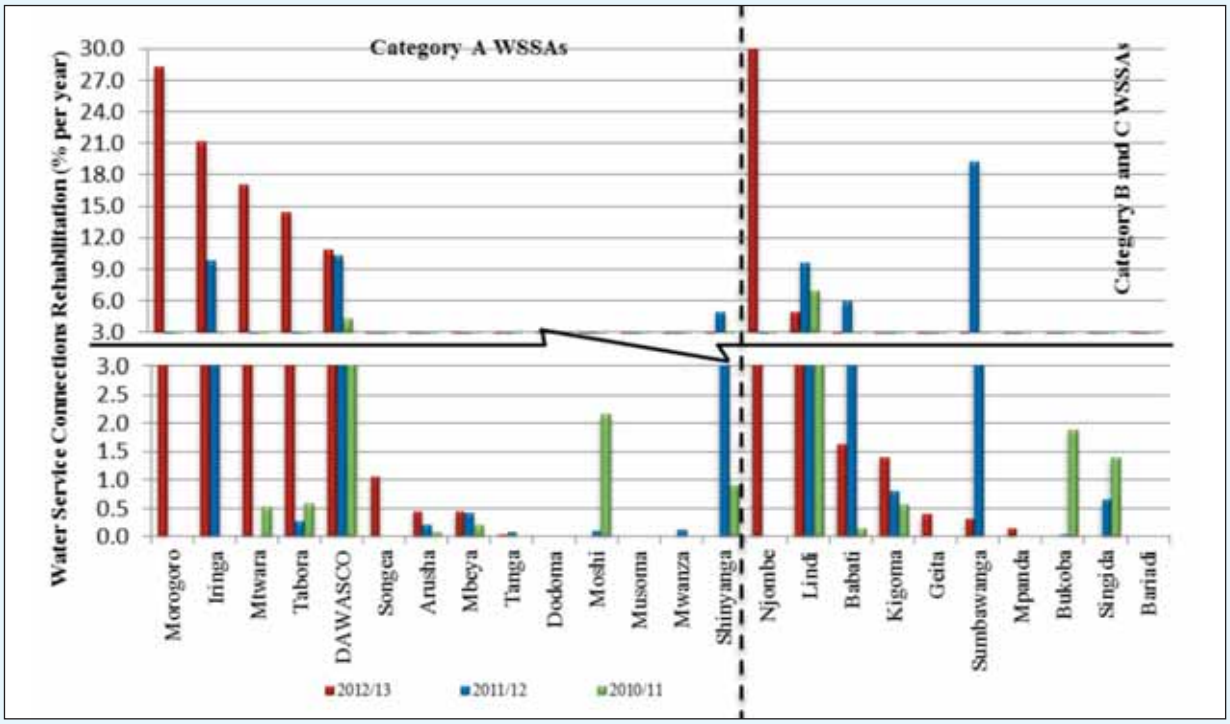


Figure 2.6: Water Service Connections Rehabilitation

- ❖ While most of the Regional WSSAs did not implement any water service connections rehabilitation, Morogoro, Iringa, Mtwara, Tabora, Njombe, and Lindi WSSAs have recorded significantly high water service connections rehabilitations during the reporting period. Most of the reported rehabilitations were part of the implementation of water supply projects in these areas.

- ❖ The rehabilitation of the water service connections done by DAWASCO was implemented as part of its operational activities funded internally.

2.8 Non-Revenue Water (NRW)

Discussion in this section is in three-fold considering Non-Revenue Water (NRW) computed as percentage of water production, NRW computed as volume of water lost per kilometer of pipe network per day and NRW computed as volume of water lost per water connections per day. The results of the computations are presented in Appendix 2: Table A2.4.

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

In this section NRW is assessed as the amount of water lost in percentage of water production. The MoU signed between the Ministry of Water and the Regional WSSA, requires the Regional WSSAs to achieve the NRW target of 20% or below. None of the Regional WSSAs have been able to achieve that target for the past three years. During the reporting period, Regional WSSAs reported a slight decrease on the average NRW from 36.3% reported in 2011/12 to 35.6%. DAWASCO, on the other hand reported an unsatisfactory increasing trend for NRW, whereby NRW increased from 49.8% in 2011/12 to 55.5%. The lease contract signed between DAWASA and DAWASCO requires DAWASCO to achieve a NRW target of 35% in 2012/13. Figure 2.7 below gives the graphical illustration of NRW trend by the Regional WSSAs and DAWASCO during the past three years.

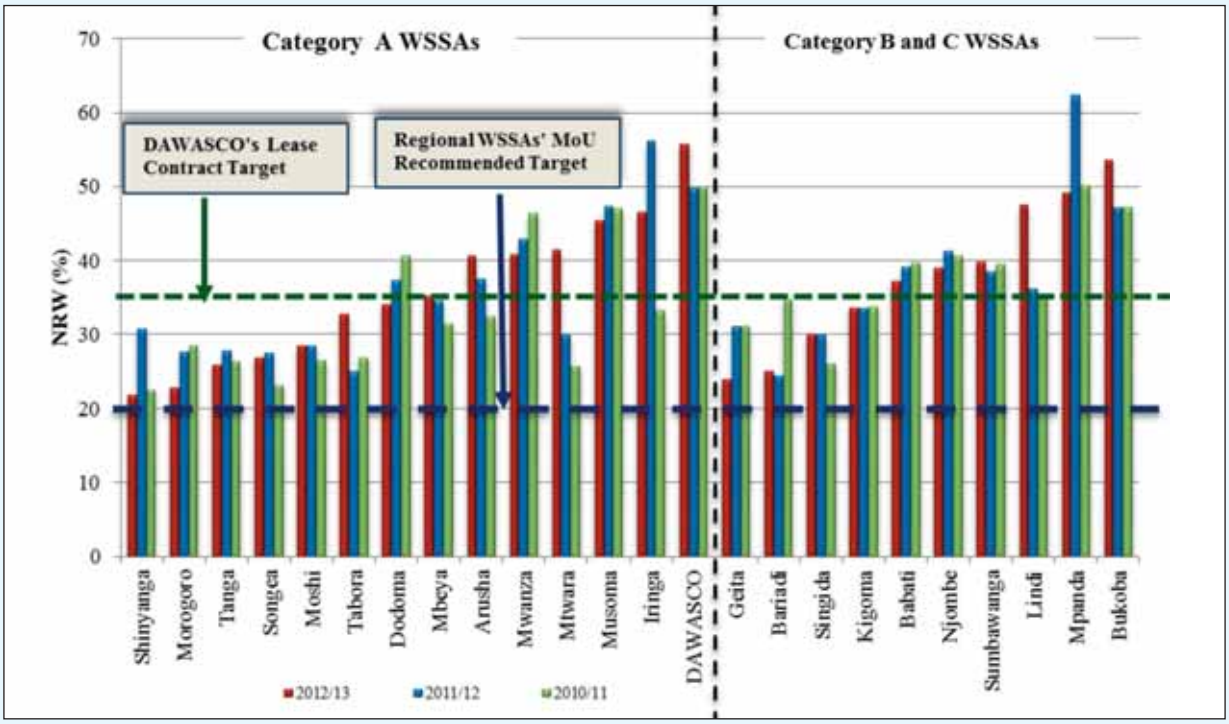


Figure 2.7: Non-Revenue Water (as percentage of water production)

- The lowest NRW during the reporting period was 22% reported by Shinyanga WSSA. Previously in 2011/12, the lowest NRW was 25% which was reported by Tabora WSSA. Notably, during the reporting period, Tabora WSSA has reported an unsatisfactory substantial increase in its NRW which reached 32.7%. The increase was caused by improvement in measuring the actual billed volume of water after metering all the active water connections. Previously, Tabora WSSA over-estimated the volume of water consumed by its unmetered customers.

- The highest NRW for Regional WSSAs during the reporting period was 53% reported by Bukoba WSSA which was explained to be due to the estimation of billed volume of water consumed by unmetered customers. Previously in 2011/12, the highest NRW among the Regional WSSAs was 62.4% which was reported by Mpanda WSSA.

- Mpanda WSSA reported the highest decrease in NRW during the reporting period which dropped from 62.4% in 2011/12 to 49% in 2012/13. However, Mpanda have a very low metering ratio (13.5%), thus the reported water consumption is based on an estimation and may not necessarily represent the real situation. Further, some of the water production points of Mpanda WSSA are also unmetered, hence production volumes are also not very reliable.

- Mtwara WSSA reported the highest increase in NRW during the reporting period which increased from 29.9% in 2011/12 to 41.4% in 2012/13. Mtwara reported that the increase in NRW is due to high physical water losses caused by the pipe breaks caused by the road construction activities.

- It is worth commending the progressive improvement (decrease) of NRW over the three years period reported by Dodoma, Babati, Mwanza and Morogoro WSSAs as well as Kigoma WSSA, though the improvement is really very slow (decreasing only 0.1% of its NRW each year). However, the NRW reported by Morogoro WSSA is mainly an estimation, because not all of its customers are metered, and also there are no bulk water meters at the water sources.

- On the other hand, unsatisfactory increasing trend of NRW over the three years' period was observed in Mtwara, Arusha, Mbeya and Lindi WSSAs.

❖ Reduction of NRW continued to be a challenge to DAWASCO. During the reporting year, DAWASCO reported an increase in its NRW from 49.8% reported in 2011/12 to 55.5%. DAWASCO reported that the increase in NRW is mainly due to inaccuracy of the customers' water meters, which under-records water consumptions data.

(b) NRW in m^3 of water lost per km per day

In this section NRW is assessed in terms of the amount of water lost in a kilometer length of the pipe network in one day (m^3 lost/km/day). This indicator enables a fair comparison of the utilities' NRW by taking into consideration the varying water production volumes and pipe network lengths; these are then factored in when assessing utilities' achievements in managing the water losses. On average, during the reporting period Regional WSSAs have reported a weighted average daily amount of water lost in a kilometer of distribution network of 21.09m^3, almost the same amount as 21.1m^3 which was reported in 2011/12, whereas DAWASCO reported an increase from 46.9m^3 to 54.4m^3 during the same period as presented in Appendix 2: Table A2.4 and illustrated in Figure 2.8 below.

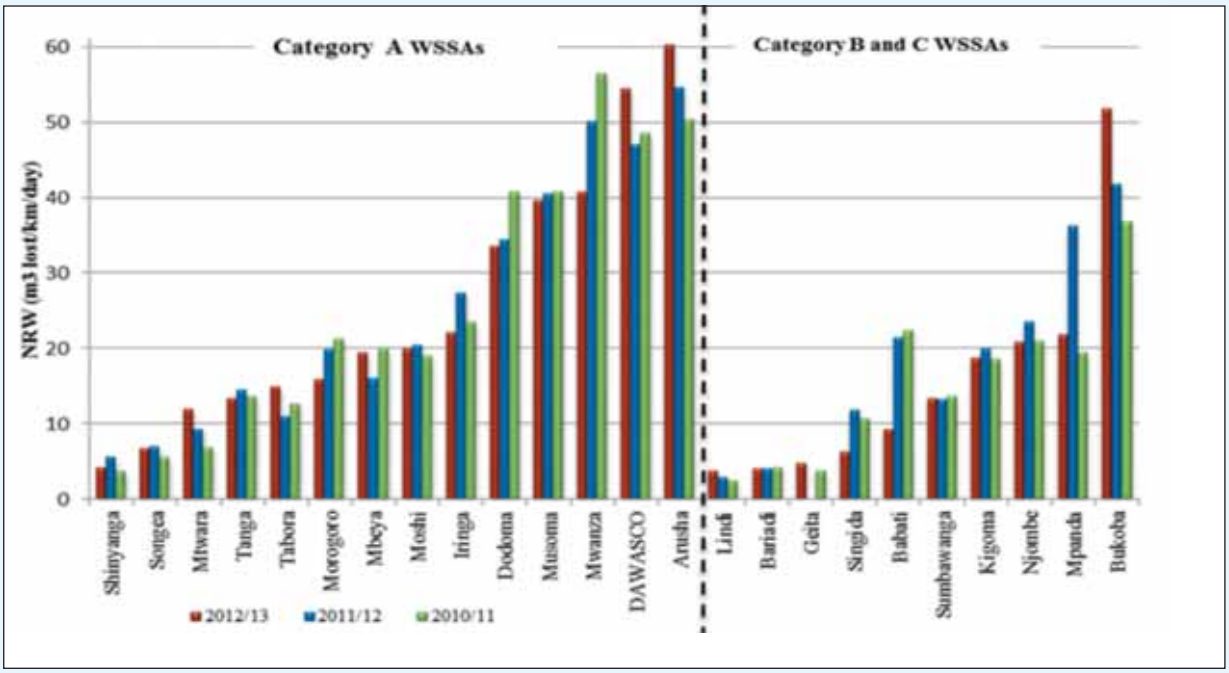


Figure 2.8: NRW in m^3 lost per km per day

❖ During the reporting period, Lindi WSSA had the lowest water loss of 3.8 m^3 in a kilometer length of the distribution network per day. Previously in 2011/12, the lowest water loss per kilometer length per day of the distribution network was 2.9 which was reported by Geita WSSA.

❖ Other Regional WSSAs which reported very low water loss per kilometer length of the distribution network include Geita and Bariadi WSSAs. But, these utilities also reported very low water production volumes, which may be the reason for their reported low water losses.

❖ Arusha WSSA continued to have the highest NRW (m^3 lost per km per day) which was 60.2m^3 of water per day in a kilometer length of the distribution network. Previously in 2011/12, Arusha WSSA had the highest volume of 54.48 m^3 of water lost per km per day.

❖ The highest decrease of water loss per km per day during the reporting period was from 23.5m^3 to 20.8m^3 as reported by Mpanda WSSA; a decrease of about 14m^3 per km per day. But, again it should be noted that Mpanda has very low metering ratio, thus the reported volumes are mainly an estimation.

- The highest increase of water loss per km per day during the reporting period was from 41.7m^3 to 51.7m^3 as reported by Bukoba WSSA; an increase of about 10m^3 of water loss per kilometer length of the distribution network.

- The increase in daily water loss per kilometer length of the water distribution network in DAWASCO is mainly due to the overall increase in NRW reportedly to be mainly attributable to the inaccuracies of the water meters.

(c) NRW in volume of water lost per connection per day

This indicator is intended to assess the amount of daily water loss in relation to the number of active water connections in the utility. During the reporting period, the Regional WSSA lost an average of 430 litres of water per connection in a day, increasing from 370 litres per connection per day reported in 2011/12. DAWASCO reported an increase on the average daily water loss per connection from 920 litres in 2011/12 to 1,170 litres during the reporting period. Figure 2.9 below gives the graphical presentation of the water loss per connection per day for water utilities during the past three years.

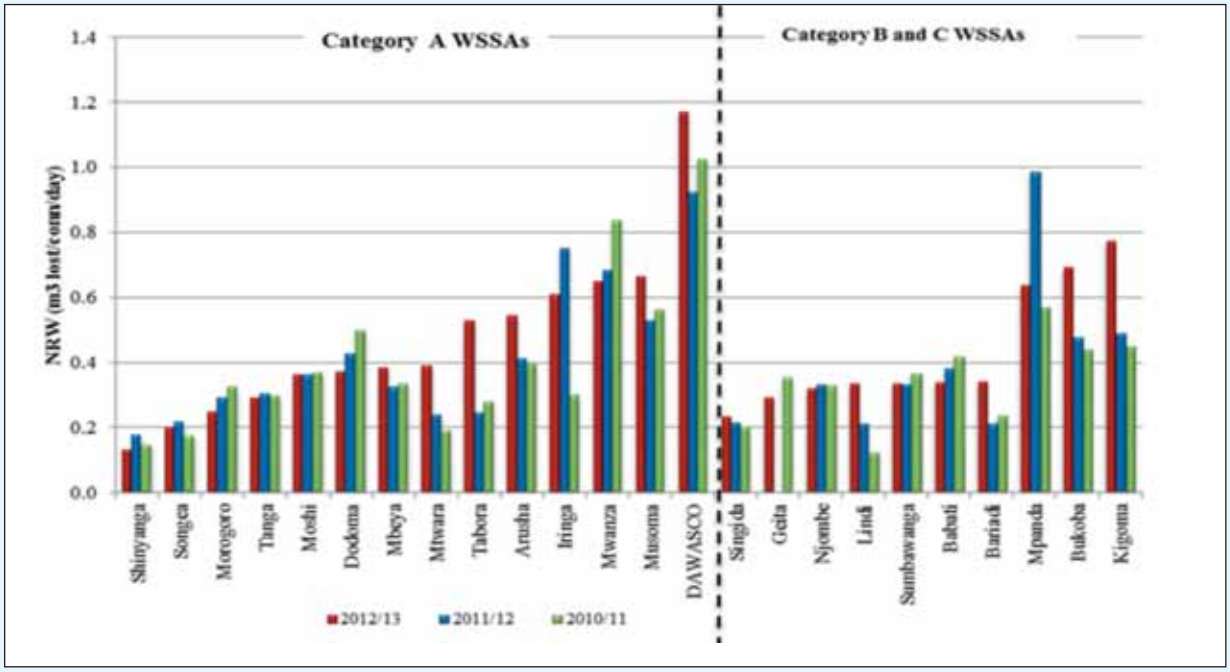


Figure 2.9: NRW in volume of water lost per connection per day

- For two years consecutively, Shinyanga WSSA has remained to be the utility with the lowest amount of daily water loss per connection among the Regional WSSAs by reporting 130 litres of daily water loss per connection in 2012/13. Previously, in 2011/12, Shinyanga WSSA had the lowest volume of 180 litres of daily water loss per connection.

- The highest amount of daily water loss per connection among the Regional WSSAs was 770 litres which was reported by Kigoma WSSA. In the previous year, Mpanda WSSA had the highest amount of daily water loss per connection among Regional WSSAs of 990 litres. Nevertheless, during the reporting period, Iringa WSSAs has made commendable efforts to improve the situation which translated to be the second highest decrease in the daily water loss per connection among all Regional WSSAs after Mpanda WSSAs, which recorded the highest decrease of 350litres per connection per day.

- DAWASCO had the highest daily water loss per connection among all utilities which has increased by 250 litres when compared to the previous year's volume.

2.9 Adequacy of Water Storage Capacities

In this section the adequacy of the water storage capacities of the Regional WSSAs is 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 weighted average storage capacities, expressed in hours of storage, for the Regional WSSAs in 2012/13 was computed to be 9.4 hours, increasing from 8.1 hours in 2011/12. On the other hand, DAWASCO had a decrease in its storage capacity, expressed in hours of storage, from 4.1 hours in 2011/12 to 3.9 hours. The detailed trend on the storage capacities for the Regional WSSAs and DAWASCO is presented on Appendix 2: Table A2.3 and illustrated in Figure 2.10 below.

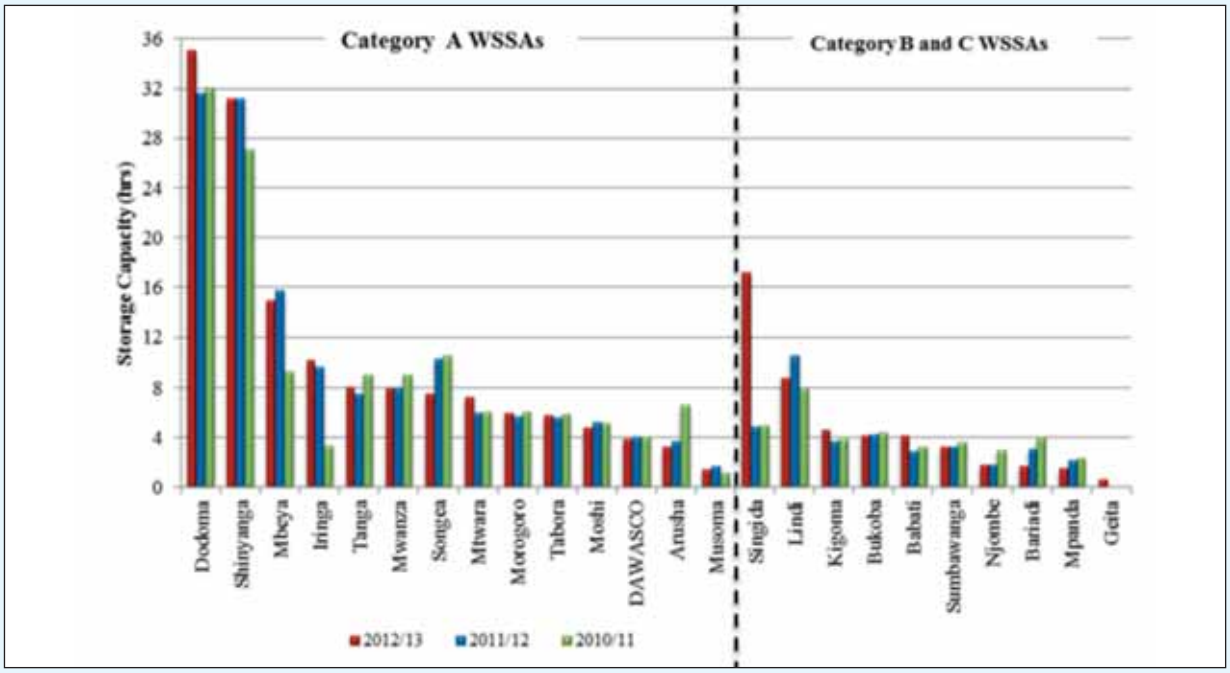


Figure 2.10: Storage Capacities

- During the reporting period, Dodoma WSSA has increased its total storage volume by 6,700m^3 and achieved the highest storage capacity, expressed in hours of storage, of 35 hours among all the Regional WSSAs. In the previous year, Dodoma WSSA had also the highest storage capacity of 31.6 hours.

- On the other hand, Geita WSSA reported the lowest storage capacity, expressed in hours of storage, of 0.6 hours.

- The sharp increase in storage capacity that is observed in Singida WSSA during the reporting period, is the result of the completion of the ongoing water supply project which together with other activities, increased the total storage capacity for Singida WSSA by 5,500m^3.

- It should be noted that most of the Regional WSSAs have not achieved the minimum recommended duration for the storage capacity of 7 hours. The higher weighted average storage capacity duration for Regional WSSAs is mainly contributed by high storage capacity duration in Dodoma, Shinyanga, Singida and Mbeya WSSAs.

- DAWASCO's water storage capacity volume remained unchanged at 84,700m^3 as it was in the previous year; meanwhile the daily water demand has increased from 496,000m^3 in 2011/12 to 520,000m^3 during the reporting period. This translates to 3.9 hours of storage capacity duration in 2012/13 decreasing from 4.1 hours reported in the previous year.

2.10 Utilization of Sewer Networks

Utilization of sewer networks is assessed by comparing the number of sewerage connections in a kilometer length of the sewer network. In 2012/13, the ten Regional WSSAs with sewerage networks maintained the weighted average of 44 connections in a kilometer length of the sewer network as it was reported in 2011/12. Meanwhile, DAWASCO reported a decrease in sewerage connections density from 91 connections per kilometer reported in 2011/12 to 83 connections per kilometer. Appendix 2: Table A2.5 provides the detailed trend of this indicator for the past three years for the ten Regional WSSAs and DAWASCO. The trends are also illustrated in Figure 2.11 below.

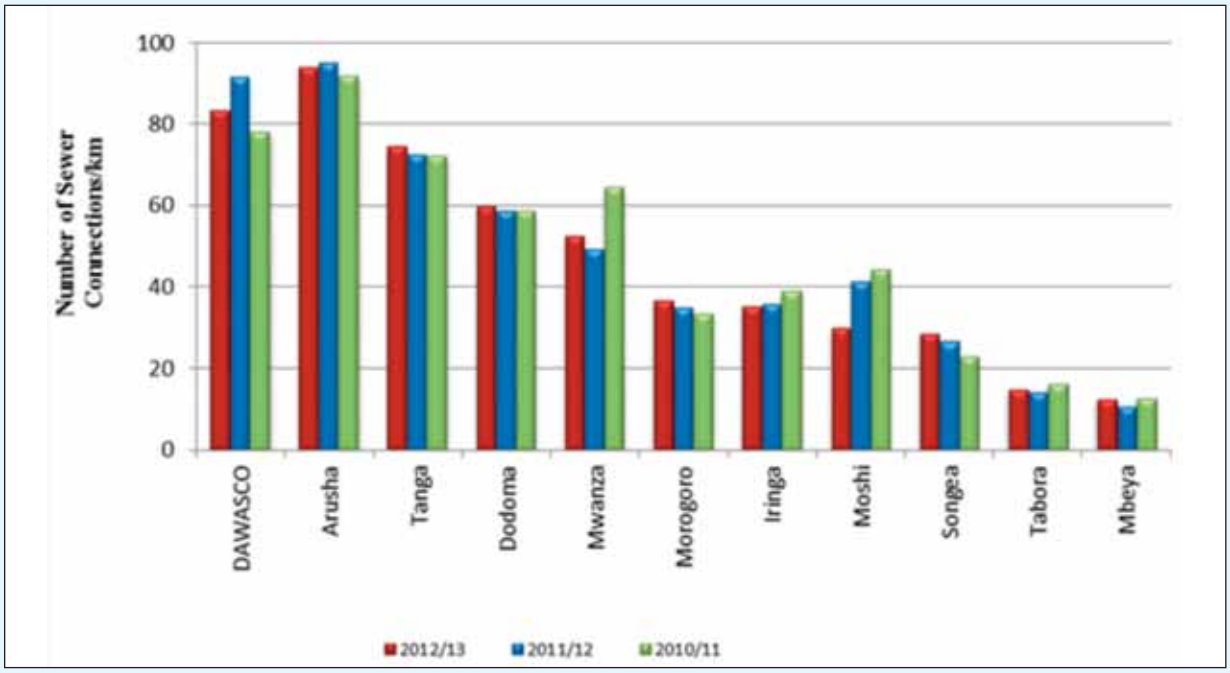


Figure 2.11: Number of sewerage connections per kilometer of sewer network

- A similar performance comparison in Regional WSSAs is observed during the reporting period as it was in the previous year, with Arusha WSSA having the largest number of sewerage connections per kilometer length of the sewer network and Mbeya WSSA having the lowest number. However, a slight increase was observed in all the WSSAs except in Arusha, Moshi and Iringa WSSAs which reported a decrease in number of sewerage connections per kilometer length of the network. The three WSSAs have reported an extension of their sewerage network, while the number of sewerage connections did not increase significantly.

- The reported decrease in sewerage connections density by DAWASCO was due to the decrease in sewerage connections from 21,742 in 2011/12 to 16,539 during the reporting year following the database cleanup and demolishing of buildings with sewerage connections.

2.11 Performance of Sewer Networks

Performance comparison of sewer networks has been done by analyzing the frequency of sewer blockages in a kilometer length of the sewer network expressed as the number of blockages/km/year. On average, in 2012/13, the ten Regional WSSAs with sewerage systems reported an average of 15 sewer blockages in a kilometer length of the network. Previously, in 2011/12, the reported average was 14 sewer blockages per km of sewer network. DAWASCO reported almost the same number of sewer blockages per kilometer length of 9 blockages as reported in 2011/12. The detailed trends of sewer blockages over the past three years for the ten Regional WSSAs and DAWASCO are presented in Appendix 2: Table A2.5 and illustrated in Figure 2.12 hereunder.

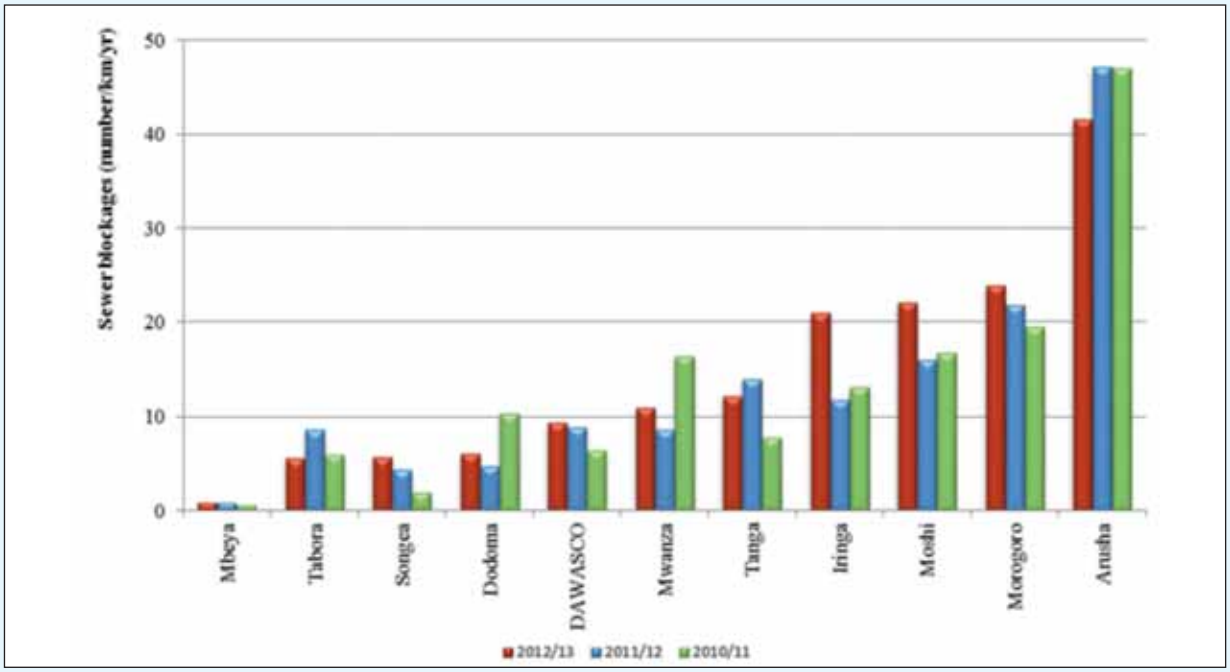


Figure 2.12: Number of sewer blockages in a kilometer of sewer network

- As it was in the previous year, during the reporting period, Arusha and Mbeya WSSAs reported the highest and lowest number of sewer blockages respectively. The highest sewer blockages in Arusha WSSA was reported to be due to insufficient capacity of the sewerage system which is being overloaded.

- It is worth noting that Dodoma WSSA and DAWASCO, although having a significant number of sewer connections in a kilometer length of sewer network, reported relatively few sewer blockages compared to other utilities.

- During the year under review, DAWASCO reported a total of 1,863 sewer blockages, which translates to 9 blockages per kilometer length of the sewer network, about the same number as reported in 2011/12. DAWASCO explained that most of the sewer blockages that were reported during the reporting period were caused by manhole cover theft in most of the areas, as well as the destruction of the sewerage system by the on-going road construction activities along Morogoro road.

2.12 Water Quality Monitoring

Water utilities are obliged to carry out regular water quality tests to ensure that water supplied comply with the Tanzanian Standards for potable water. Most of the Regional WSSAs contracts the Regional Water Laboratories to conduct the water quality testing, although few of them test their water quality using their own laboratories. The most common tested parameters are E-coli, Turbidity, Residual Chlorine and pH. The recommended average compliance for the four parameters should be at least 98%.

Generally, for the past three years, most of the Regional WSSAs have reported to satisfactorily comply with the water quality standards as set by TBS in most of the parameters as presented in Appendix 2: Table A2.6. The overall average compliance with the drinking water quality standards has decreased from 90% reported in 2011/12 to 86% during the reporting period. For DAWASCO, the average compliance declined slightly from 99% in 2011/12 to 94% during the reporting period. Figure 2.13 below gives the graphical presentation of the average compliance with drinking water quality standards for the four water quality parameters.

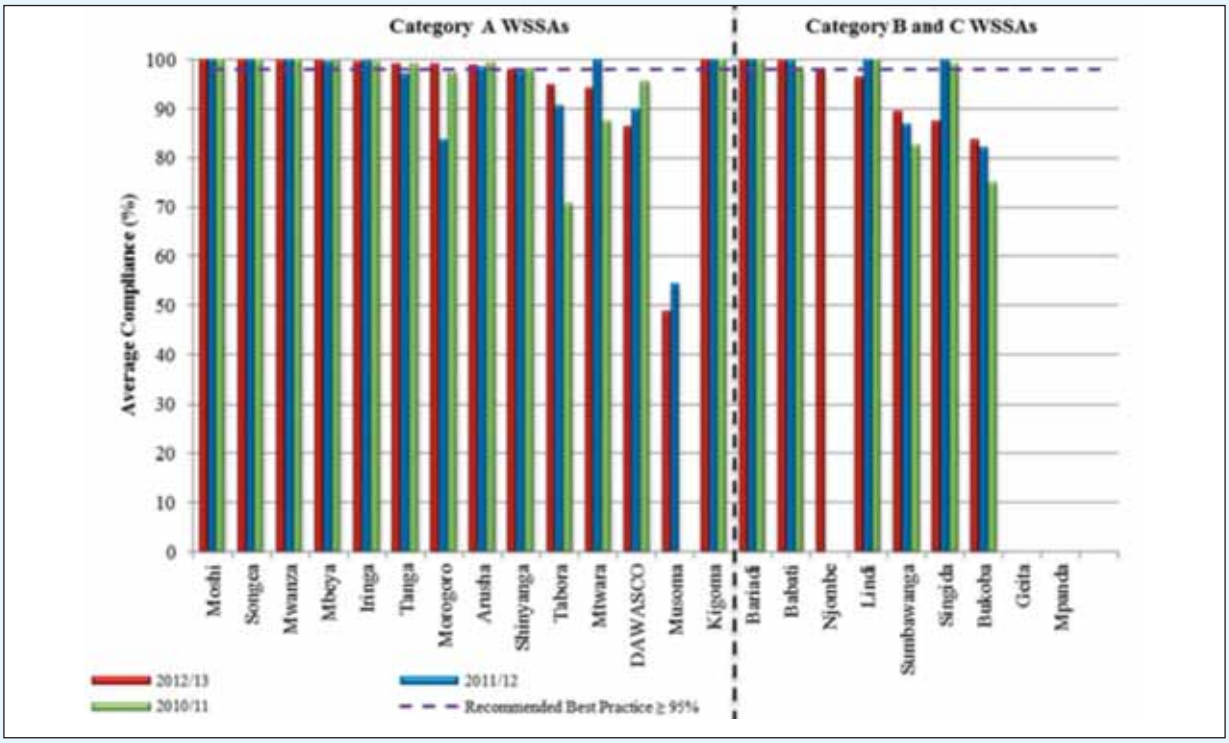


Figure 2.13: Reported Water Quality Compliance

- ❖ Of the new Regional WSSAs, Njombe WSSA was the only one with records for water quality testing over the past three years.

- ❖ Increased compliance to water quality standards was reported by Shinyanga, Tabora, Morogoro, Sumbawanga and Njombe WSSAs, while decreased compliance was reported by Mtwara, Arusha, Musoma Singida, Lindi and Bukoba. The rest of the utilities reported 100% compliance as it was during the previous year 2011/12.

- ❖ During the year under review, DAWASCO reported a decreased compliance with the water quality standards in terms of Turbidity and pH. Meanwhile, increased compliance with Residual Chlorine Standards have been reported. On average, the overall water quality compliance as reported by DAWASCO has slightly decreased from the average compliance reported in 2011/12.

2.13 Wastewater Quality Monitoring

WSSAs are obliged to treat their wastewater effluent discharge to meet the standards set by TBS. Except for Tanga WSSA, all other WSSAs with sewerage systems treat their wastewater by using the Waste Stabilization Ponds. Tanga WSSA discharges its wastewater directly into the Indian Ocean. Since its establishment, the sewerage treatment system for Tabora WSSA has never discharged any effluent. This is due to the low usage of the system caused by the limited sewer network distribution. For this reason, Tabora WSSA does not conduct any wastewater effluent quality testing.

For comparison of ten Regional WSSAs with sewerage systems, two wastewater quality parameters are considered, namely BOD_5 and COD. The overall average compliance with both BOD_5 and COD standards for eight Regional WSSAs was found to be 76.6%. Previously, in 2011/12, the average compliance with BOD_5 standards was 70.6%, while that of COD was 73%. For DAWASCO non-compliance was reported in both, the BOD_5 and COD standards. The three years' trend on the performance of the utilities in complying with the wastewater effluent quality standards is presented in Appendix 2: Table A2.7 and illustrated in Figure 2.14 below.

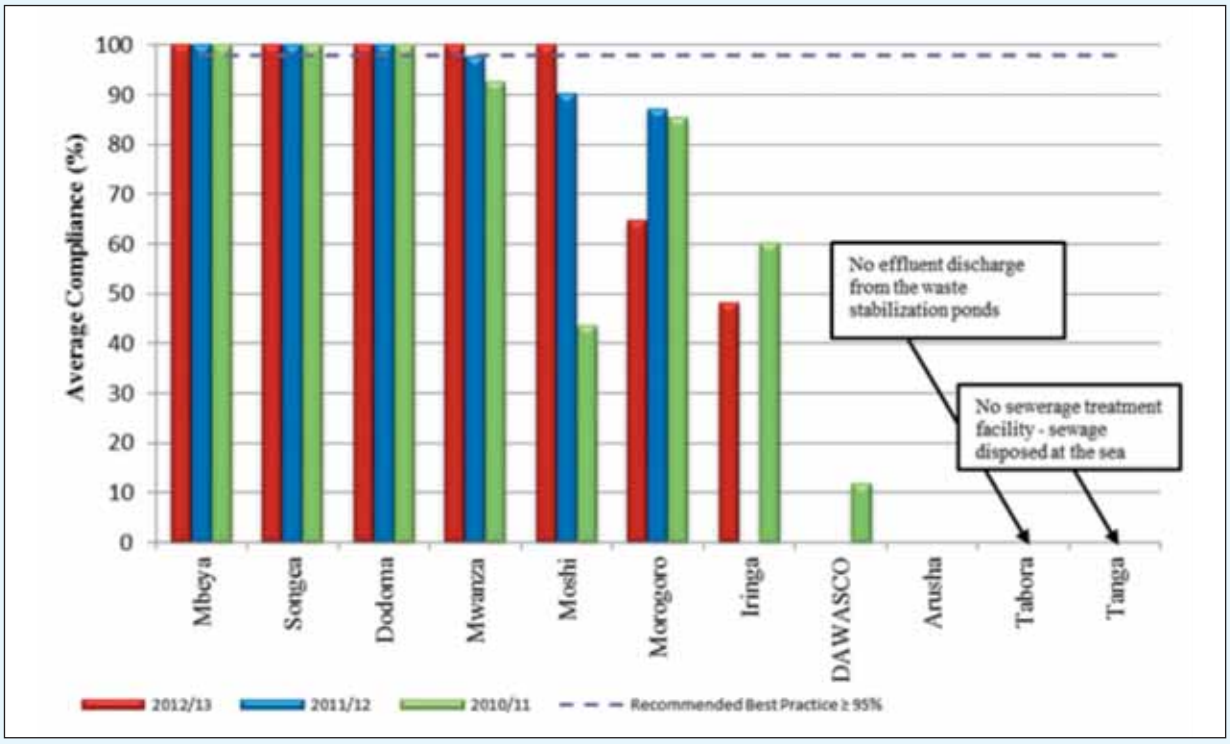


Figure 2.14: Waster effluent quality compliance

- During the reporting period, Moshi and Mwanza WSSAs achieved 100% compliance with the wastewater effluent quality and joined Mbeya, Songea and Dodoma WSSAs which maintained 100% compliance throughout the three years. Moshi WSSA reported that over the past two years the Utility embarked on de-sludging exercise of their anaerobic ponds.

- Iringa WSSA which reported zero compliance with wastewater effluent quality in 2011/12 reported 48% compliance during the reporting period. This is explained by Iringa WSSA to be due to improvement of the performance of wetlands constructed downstream of the waste stabilization ponds.

- For the past four years, Arusha WSSA's wastewater effluents from the Waste Stabilization Ponds did not comply with the required standards. This was due to low capacity of the ponds to treat the increased inflow volume of the wastewater and the high concentration of organic and inorganic matter in the waste water, some coming from the industries which do not pre-treat the waste water. Plans are underway to construct new wastewater treatment plants.

- For the case of DAWASCO, a consistent failure of compliance with BOD_5 and COD wastewater effluent quality standards was reported. The main cause of non-compliance is reported to be due to inadequate digestion of the biomass and heavily loaded influents from industries and discharges from sewerage tankers.

2.14 Water and Wastewater Quality Monitoring by EWURA

During the reporting period, EWURA carried out independent drinking water and wastewater effluent quality testing for all the Regional WSSAs except for the new Regional WSSAs of Bariadi, Njombe, Geita and Mpanda. Table A2.6a in Appendix 2 compares the results on drinking water and wastewater effluent quality done by EWURA and those reported by the Regional WSSAs. Figure 2.15 shows the graphical presentation of the comparisons of the overall average compliance with the drinking water quality standard for the four water quality parameters, namely E-coli, pH, Residue Chlorine and Turbidity. Figure 2.16 shows the comparisons of the overall average compliance with the wastewater effluent quality standard for the two parameters, namely COD and BOD_5.

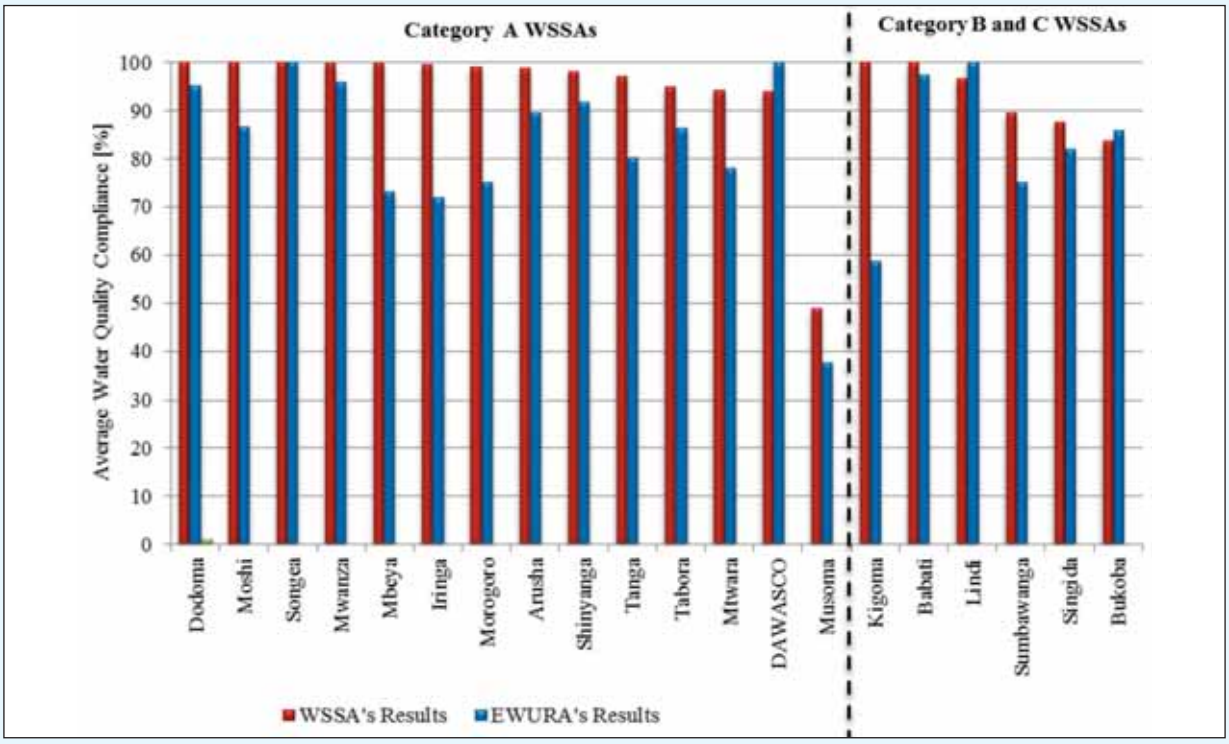


Figure 2.15: Comparison of WSSA's and EWURA's results on water quality

- EWURA's results were generally not in agreement with most of the WSSAs except for Songea WSSA. The significant difference in average compliance with water quality standards was observed at Kigoma WSSA.

- For the case of DAWASCO, the results showed that wastewater effluent quality was not compliant to the standards. Meanwhile, the results for drinking water quality showed 100% compliance with the all the four parameters of E-coli, Turbidity, pH and Residue Chlorine.

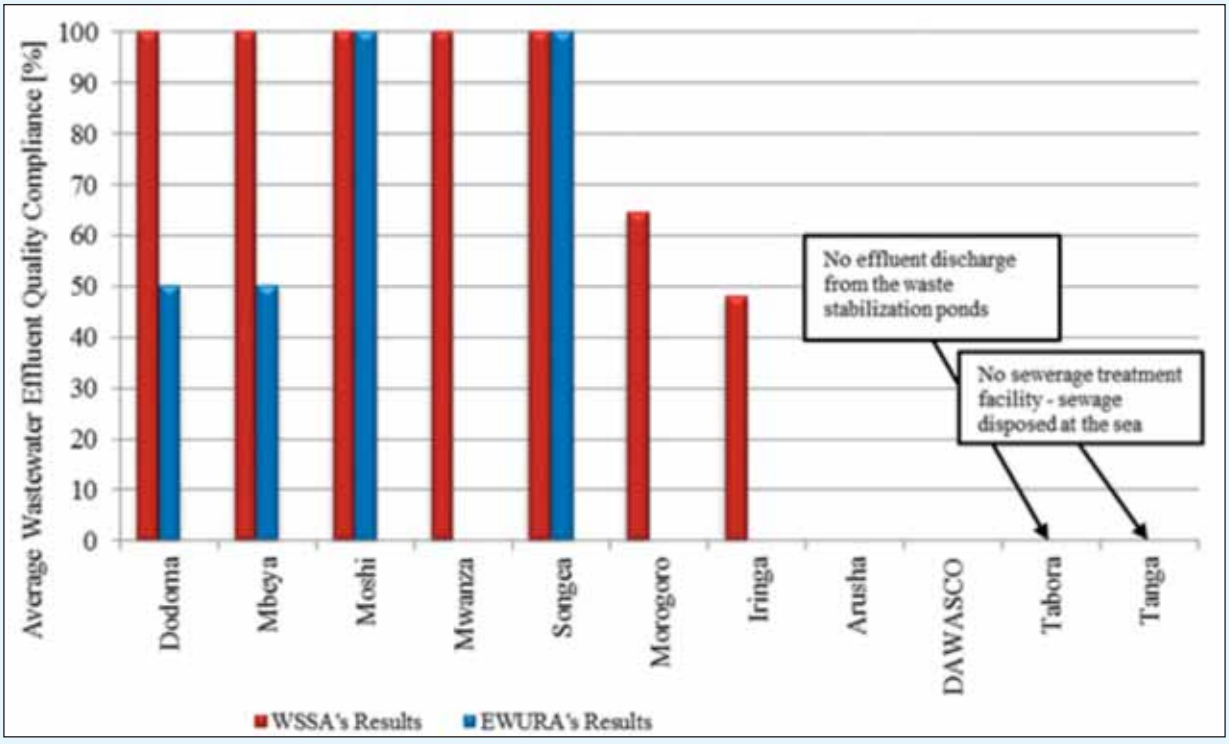


Figure 2.16: Comparison of WSSA's and EWURA's results on wastewater effluent quality

- EWURA observed similar results on both BOD_5 and COD with the ones reported by Moshi, Arusha, Songea WSSAs and DAWASCO. Note that Arusha WSSA and DAWASCO had zero compliance with BOD_5 and COD quality standards in accordance with EWURA's and their own results. There were significant variations from the reported results of the other WSSAs in one or both wastewater effluent parameters.

3.0 BUSINESS AND COMMERCIAL OPERATIONS OF WSSAs

This section provides an analysis of Regional WSSAs and DAWASCO in terms of their business and commercial operations. The analysis will employ some of the key business and commercial performance indicators namely, water and sewerage service coverage, metering ratio, water and sewerage connections, complaints resolutions and revenue collection efficiency.

3.1 Total Water connections

During 2012/13, the total number of water connections for Regional WSSAs reached 320,965 which is equivalent to a 6.5% increase as compared to 301,365 water connections reported in 2011/12. Contrary to the increasing water connections trend in all Regional WSSAs, DAWASCO's total number of water connections was reported to decrease from 132,088 in 2011/12 to 130,964 in 2012/13. Figure 3.1 below shows water connections trend for Regional WSSAs and DAWASCO while Appendix 2-Table A2.8 provides details of the same.

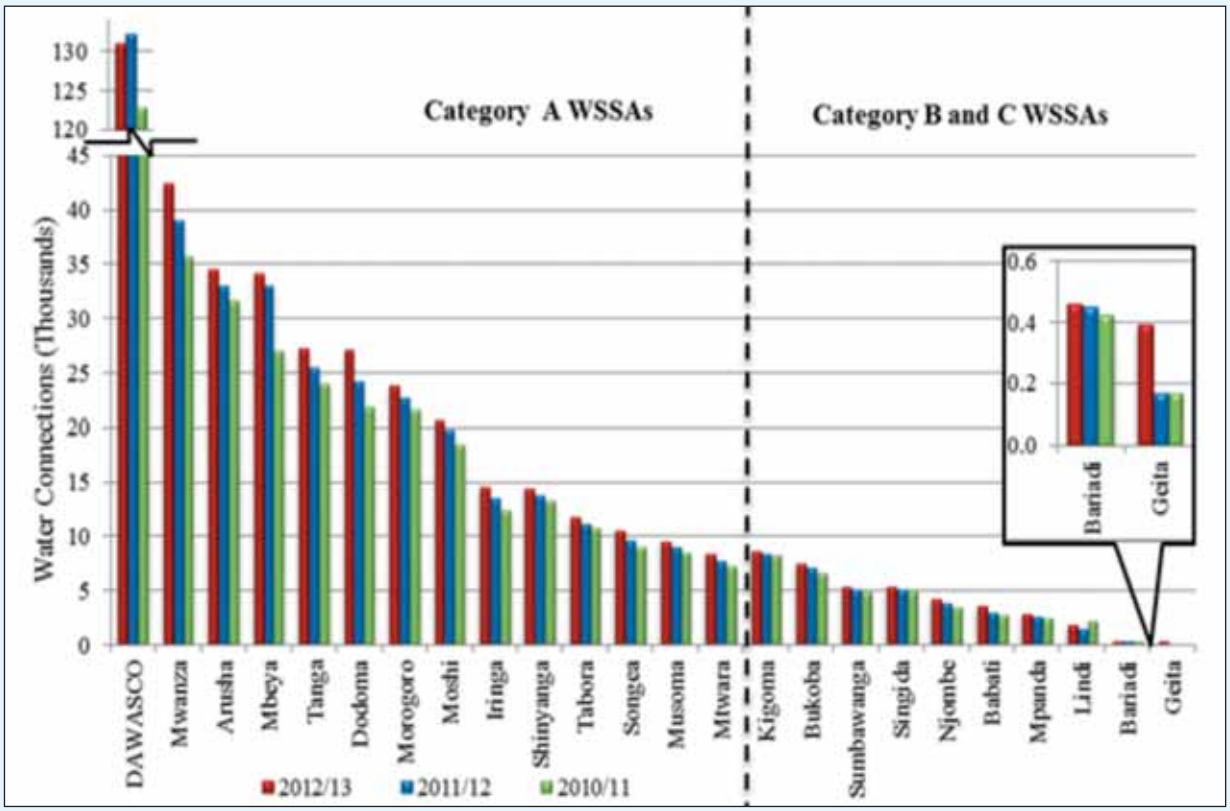


Figure 3.1: Three Year Trend for Total Water Connection

- During 2012/13 all Regional WSSAs increased their water connections

- The highest increase in the number of water connections was recorded by Mwanza WSSA whose connections increased by 3,341 followed by Dodoma and Tanga WSSAs.

- During the period, Bariadi WSSA's water connections increased by 8 which is the lowest increase among the Regional WSSAs. Other regional utilities with low increase are Singida and Kigoma WSSAs.

- It can also be noted from figure 3.2 below that most of the Regional WSSAs' water supply customers are in the domestic category (93.2% of the total water supply customers).

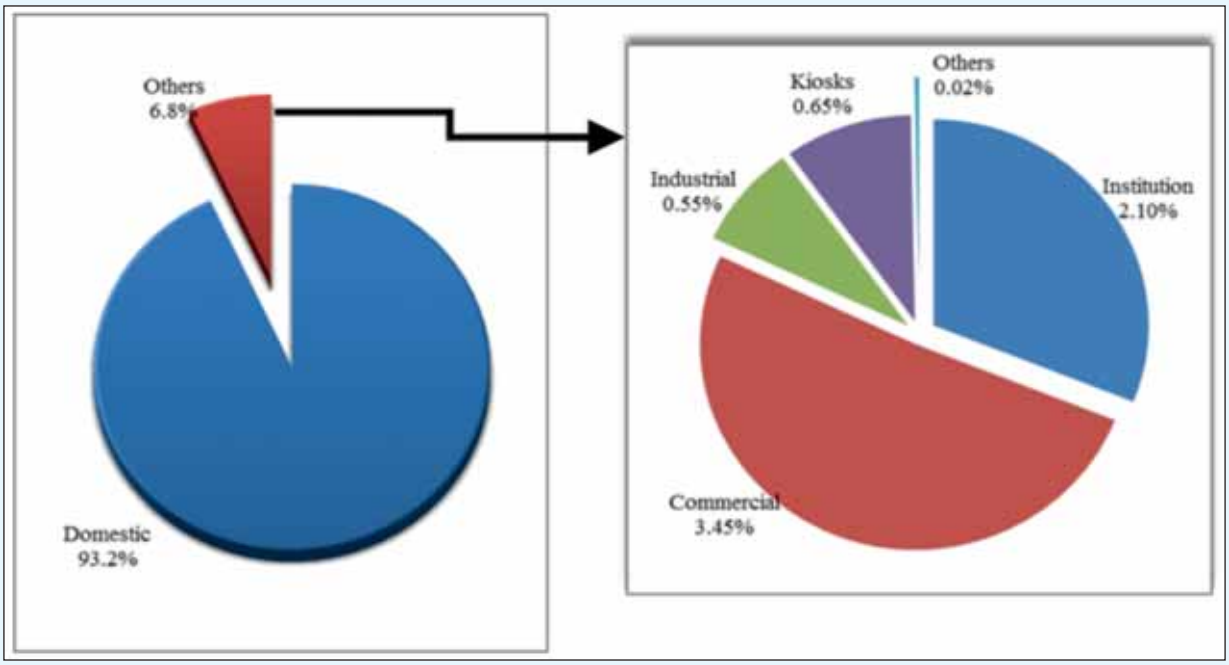


Figure 3.2: Composition of Water Supply Customers in Regional WSSAs

- DAWASCO's decrease in total number of water connections was reported to be due to disconnecting customers who had no water service. However, the number of active water connections increased from 121,351 in 2011/12 to 122,342 in 2012/13. On this trend of active connections, DAWASCO elucidated that some of the moribund customers (those who are inactive for more than a year) started receiving water and were therefore activated.

- Similar to Regional WSSAs, domestic customers are the majority in DAWASCO's customer base. During 2012/13, the proportion of domestic customers to total customers was reported to be 96% which is an increase from 91% reported in 2011/12.

3.2 Water Kiosk Connections

Total number of water kiosks for Regional WSSAs increased from 1,977 in 2011/12 to 2,021 in 2012/13 which is equivalent to a 2.2% overall increase. Out of these only 1,559 kiosks are operational. For DAWASCO, the total number of kiosks has been reported to be 151 which is the same number reported in 2011/12. Out of these only 59 kiosks are operational. Figure 3.3 below shows three years trend on the number of water kiosks while details of the same are in Appendix 2 Table A2.8

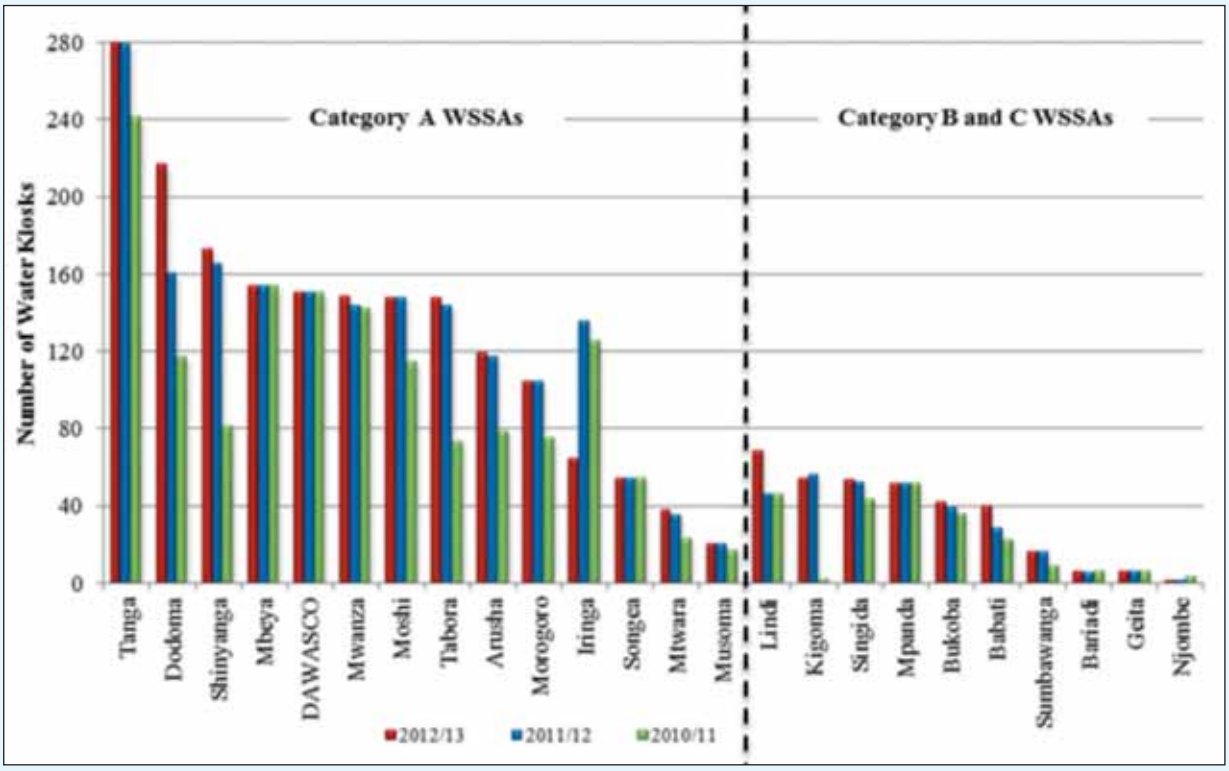


Figure 3.3: Water Kiosk Connections

- ❖ Tanga WSSA has the highest number of water kiosks while Njombe WSSA has the lowest.
- ❖ The number of water kiosks increased significantly in Dodoma, Lindi and Babati WSSAs. At least 10 water kiosks increased for each of these utilities. For Lindi WSSA, the number of water kiosks increased as a result of extension of water services in the previously unserved areas. In Babati WSSA, additional water kiosks were constructed under the WSDP project while in Dodoma WSSA additional kiosks were constructed in low income underserved areas using utility's own funds.
- ❖ The number of water kiosks decreased significantly in Iringa because the utility abandoned some of the water kiosks as a result of an increase in household connections in areas with new water network.
- ❖ DAWASCO did not update its data on the number of water kiosks during the reporting year.

3.3 Metering Ratio

In this year's report, utilities' performances on metering their customers was analysed based on metered active water connections. Previously, utilities' performances on this indicator were analysed based on total water connections, which valued the utilities' achievements by considering operational metered connections (active) and non-operational connections (inactive) whose meters were kept in stock.

Based on the foregoing, the weighted average metering ratio achieved by Regional WSSAs by the end of 2012/13 was 96.6%, while for DAWASCO, it was 93.6%. Previously, in 2011/12, Regional WSSAs reported an average metering ratio based on total connection of 83.2%, while DAWASCO reported 81.9%. Table A2.9 in Appendix 2, and Figure 3.4 below gives more details of the three years' trend of metering ratio for the water utilities.

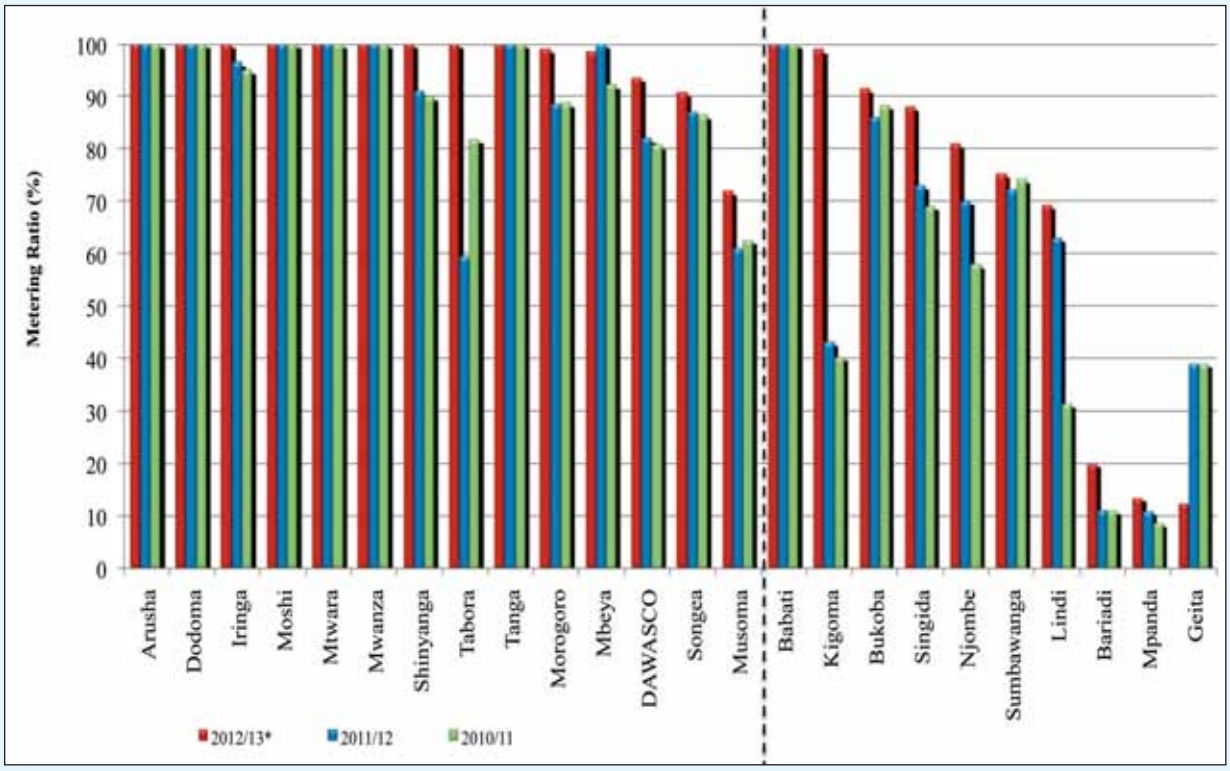


Figure 3.4: Metering Ratio

- ❖ Computation of metering ratio based on operational metered connections (active) have improved significantly in respect of the values of metering ratios of most of the utilities. Significant improvements were observed in Tabora, DAWASCO, Morogoro, Kigoma, Musoma, Singida and Njombe WSSAs.

- ❖ During the reporting period, Shinyanga, Iringa and Tabora WSSAs joined the group of the Regional WSSAs with 100% metering ratios. Other WSSAs with 100% metering ratio are Arusha, Dodoma, Moshi, Mwanza, Mtwara, Tanga, and Babati WSSAs.

- ❖ Undesirably, metering ratio decreased in Mbeya and Geita WSSAs. It was reported that Geita WSSA conducted a customer survey and eliminated all customers with malfunctioning meters in the list of metered customers. Mbeya WSSA, on the other hand, reported that the decrease in metered connections was caused by lack of water meters for installation to the restored inactive connections.

3.4 Sewerage Connections

The total number of sewerage connections for Regional WSSAs during the year reached 22,055 from 20,974 reported in 2011/12. For DAWASCO, the sewerage connections decreased from 21,742 in 2011/12 to 16,539 during the reporting period. The detailed trends of sewerage connections for the 10 Regional WSSAs with sewerage services and DAWASCO are presented in Appendix 2: Table A2.11 and illustrated in Figure 3.5 below.

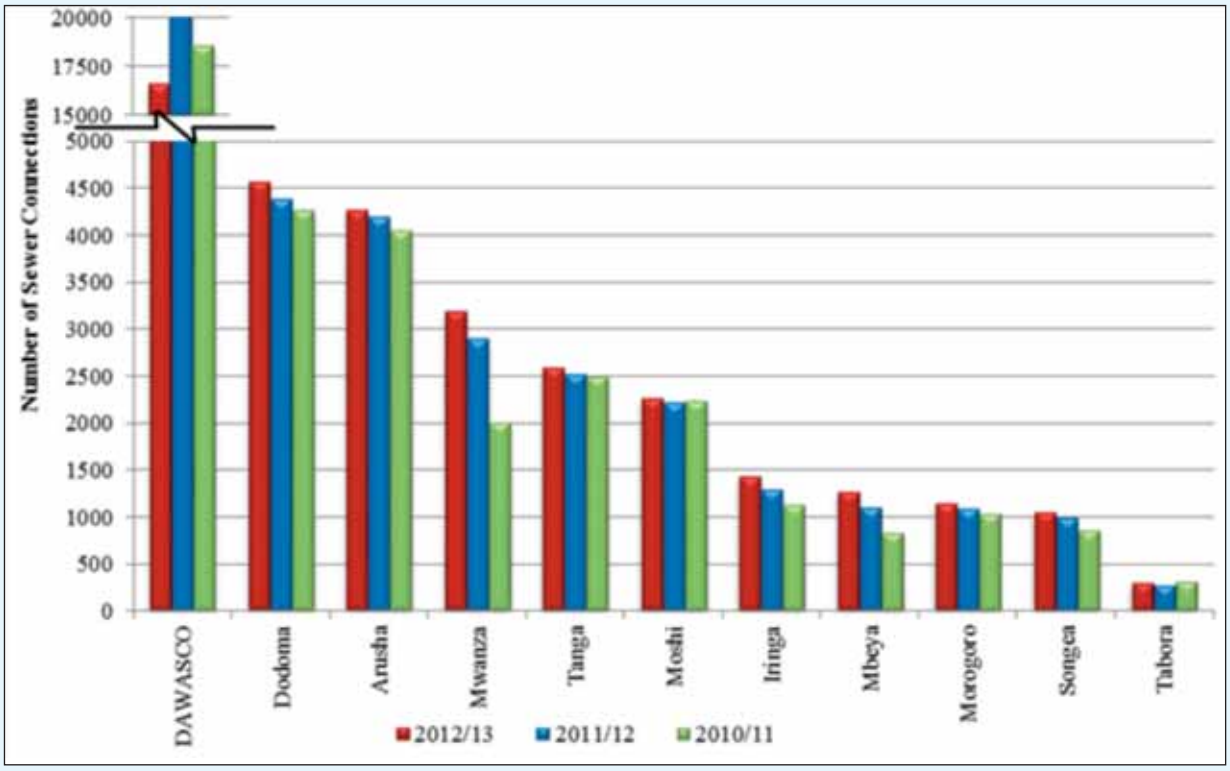


Figure 3.5: Sewerage connections

- The rate of increase in the number of sewerage connections is still very low just like in the previous year. Nevertheless, Mbeya, Iringa, Mwanza and Dodoma WSSAs reported relatively significant increase of at least 100 sewerage connections over the reporting period.

- The decrease in number of sewerage connections for DAWASCO was due to database cleanup and demolition of buildings which had sewerage connections.

3.5 Water Service Coverage

Water service coverage has been discussed in terms of population directly served with water and population living in area with water network. During the reporting period, the analysis of the service coverage considered the results of the population and housing census that was conducted in 2012 and published by the National Bureau of Statistics (NBS).

(a) Proportion of Population Directly Served with Water

On average, the proportion of population directly served by the Regional WSSAs during the reporting period slightly decreased from 66.3% reported in 2011/12 to 65.9% in the year under review. DAWASCO also reported a decrease in this indicator from 46.4% to 40.7% over the same period. Appendix 2: Table A2.10 provides detailed trends of this indicator over the past three years for Regional WSSAs and DAWASCO and illustrated in Figure 3.6 below.

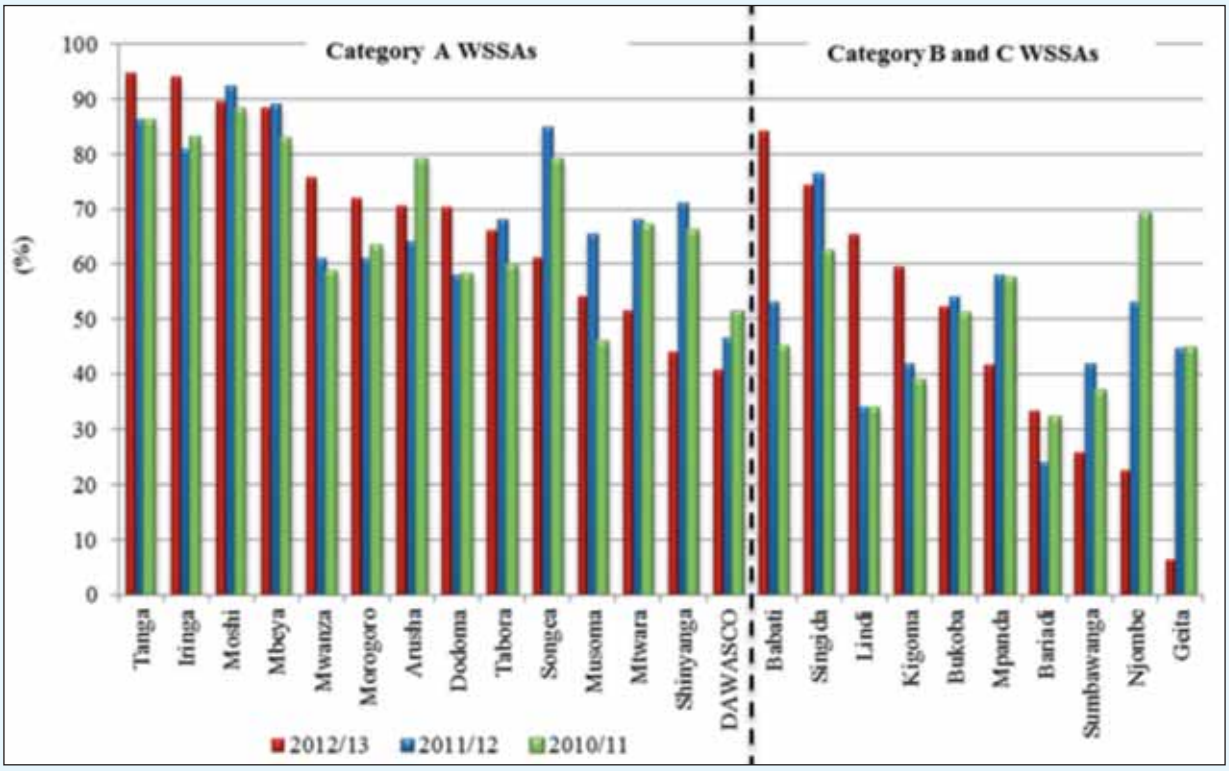


Figure 3.6: Proportion of population directly served with water

- ❖ It can be observed that most of the Regional WSSAs and DAWASCO reported a decrease in their proportion of population directly served with water. While, the main reason being the updating of the data of total population in the service area to tally with the population census, other reasons include extension of the boundaries of the service area by inclusion of peri-urban areas that were previously not part of the service area. Also some utilities, such as Geita WSSA conducted customer surveys to establish the number of people that are directly served.

- ❖ The highest achieved ratio of population directly served with water was reported by Tanga WSSA which recorded 94.5% coverage ratio. In 2011/12, Moshi WSSA recorded the highest ratio of 92.4%, which has decreased to 89.4% during the reporting year.

- ❖ The lowest achieved ratio of population directly served with water was 6.6% as reported by Geita WSSA which also recorded the highest decrease from 44.7% reported in 2011/12. This decrease was due to increase in service area for Geita WSSA after being upgraded to a Regional headquarter.

- ❖ DAWASCO reported a decrease in proportion of population directly served with water from 46.4% reported in 2011/12 to 40.7% during the reporting period. DAWASCO explained that the decrease was caused mainly by review of population data as well as a decrease in the number of water connections.

(b) Proportion of Population Living in Area with Water Network

During the reporting year, the overall average of the proportion of population living in areas with water network decreased from 83.7% in 2011/12 to 80.1% in 2012/13. As explained previously, this indicator was also affected by the revision of the population data using the census results. But also, some utilities have extended their service areas to include the peri-urban wards, thus increasing the total population in their service areas. DAWASCO reported a decrease in population living in area with water network from 67.5% reported in 2011/12 to 44.9% during the reporting period. Figure 3.7 below which is derived from Appendix 2 Table A2.10 provide more details on this indicator.

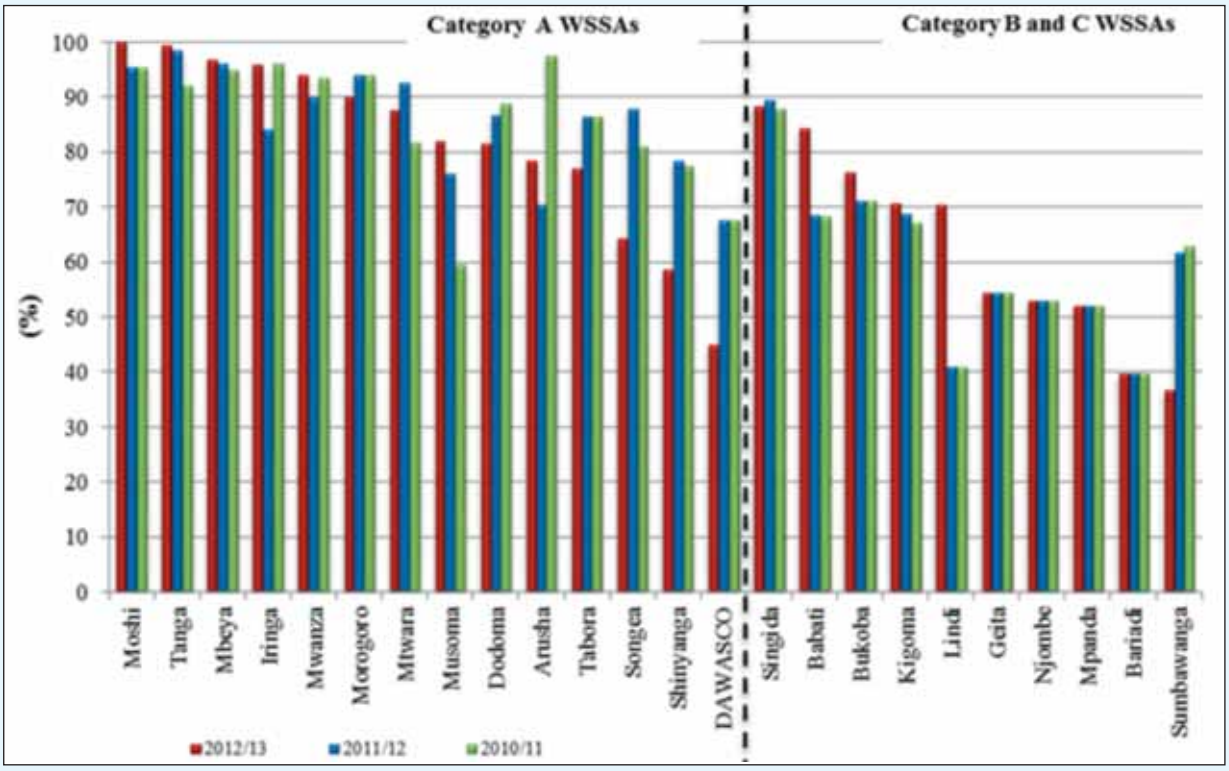


Figure 3.7: Proportion of population living in area with water network

- The highest percentage of population living in area with water network during the reporting period was reported by Moshi WSSA, which reported that the entire population in its service area lives in the area with water network.

- The highest increase on this indicator during the year under review was reported by Lindi WSSA which improved from 41% reported in 2011/12 to 70.3%. Babati WSSA also recorded a significant increase on this indicator from 68.5% to 84.4% over the same period. The main reason for these increase was the implementation of WSDP projects which included extension of water distribution network to unserved areas.

- Notable decreases in proportion of population living in area with water network were observed in Songea, Shinyanga, and Sumbawanga WSSAs. Apart from revision of the total population data on these utilities based on census results, there were also updates on their service area coverage which were expanded to include peri-urban wards.

- DAWASCO's proportion of population living in area with water network was affected by the revision of the population data using the census figures.

(c) Comparison of the service coverage indicators

Comparing the two water service coverage indicators provides an overview of the existing potentials for utilities to increase their customer base and eventually serve more people in their areas. Figure 3.8 below provides a graphical presentation of the comparison of the two indicators.

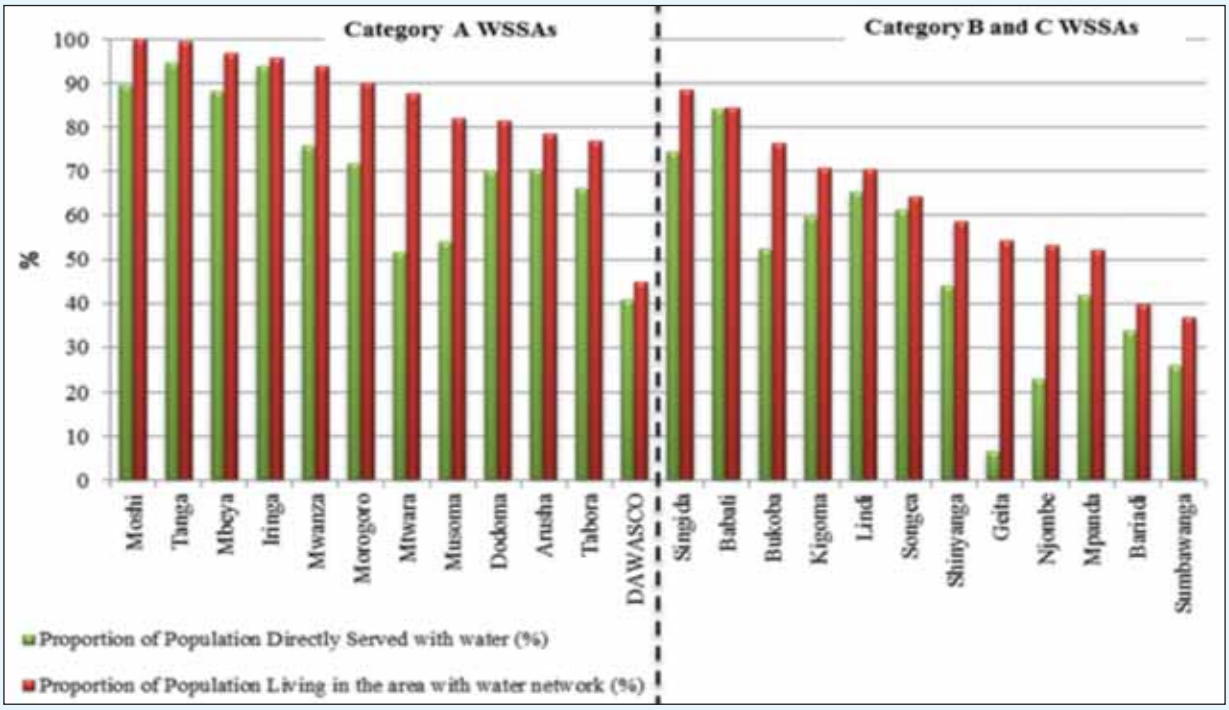


Figure 3.8: Comparison of proportions of population living in area with water network and population served with water

- It can be observed that none of the water utilities have been able to serve all the population living in the areas with water network. Most of them have greater potential of increasing their customer bases since their proportion of population living in area with water networks is significantly more than their proportion of population directly served with water.

- It is also worth noting that Babati WSSAs has almost served all the population living within their area with water network.

3.6 Average Service Hours

This indicator provides information on the daily average duration of which water supply was available at the customers' connections during the reporting period. Normally, utilities need to ensure their customers get 24 hours of service. However, during the reporting period, Regional WSSAs reported an average of 14.9 service hours, decreasing from 16 hours reported in 2011/12. At the same time, only 24.3% of the population in the Regional WSSA were reported to have received the water supply service for 24hours, decreasing from 41.5% reported in 2011/12. For DAWASCO, there was no improvement in service reliability as average service hours and percentage of water connections with 24 hours service remained at 8 hours and 25% respectively. Figure 3.9 and Appendix 2 - Table A2.12 give a detailed overview on average service hours.

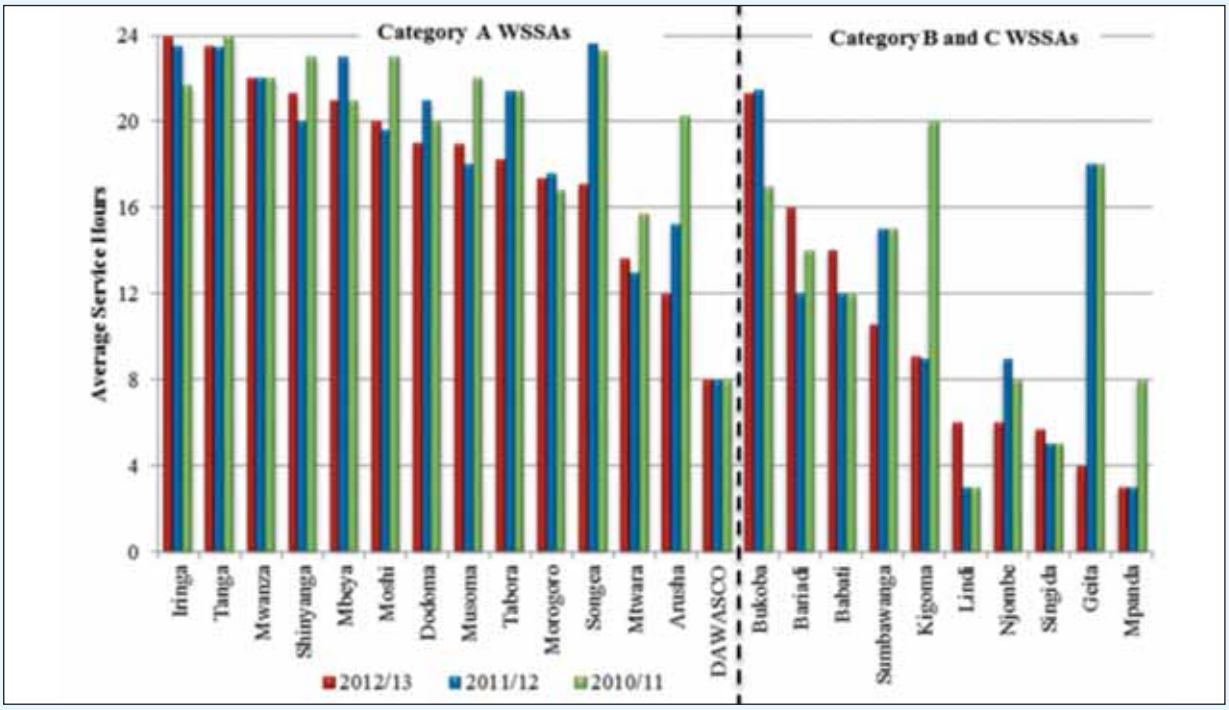


Figure 3.9: The average service hours

- ❖ Service hours decreased for the WSSAs of Mbeya, Dodoma, Tabora, Morogoro, Songea, Arusha, Bukoba, Sumbawanga, Njombe and Geita. Arusha WSSA has reported a continuous decrease in service hours over the past three years. The decrease in Tabora, Morogoro, Songea, Arusha, Sumbawanga and Njombe is mainly due to insufficient water production as a result of decreased yield of water sources affected by drought.

- ❖ There is an appreciable improvement in service hours for Lindi WSSA as a result of development of new water sources.

- ❖ Iringa WSSA has reported that water services to their customers are available for 24 hours due to the utilization of the recently commissioned water production and distribution infrastructure.

- ❖ DAWASCO's service hours are indeed less than those provided by Regional WSSAs which implies that reliability of services in DAWASCO's service area is less than in the Regional WSSAs.

3.7 Sewerage Coverage

The overall average sewerage coverage for Regional WSSAs has on average increased from 8.9% in 2011/12 to 9.2% during the reporting period. DAWASCO has reported the same sewerage service coverage of 7.4% as was in the previous year. Details on sewerage coverage are as provided in Appendix 2 –Table A2.11 and Figure 3.10 below.

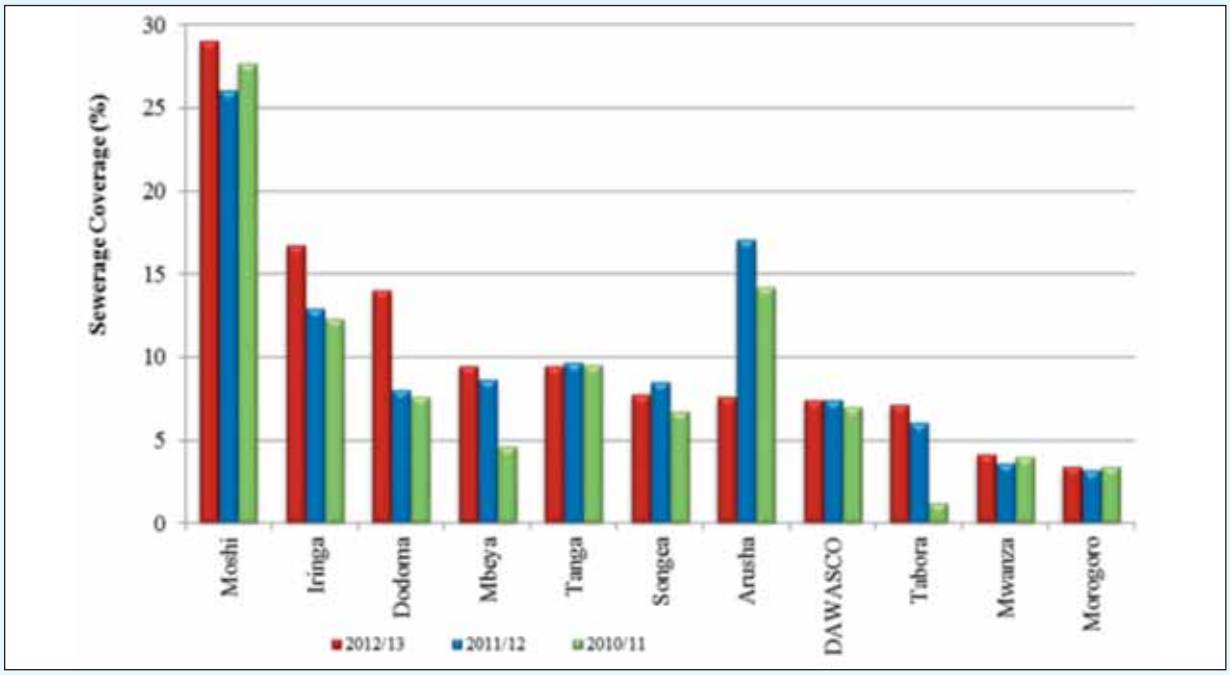


Figure 3.10: Proportion of population connected with sewerage services

- ❖ Most of the Regional WSSAs reported an increase in the proportion of population connected with sewer network, with significant increase reported by Dodoma WSSA. On the other hand, Arusha WSSA reported a significant decrease of sewerage coverage.

- ❖ DAWASCO reported the same sewerage coverage as the one reported in 2011/12.

3.8 Complaints and Complaints Resolution

The total number of complaints received by Regional WSSAs during 2012/13 was 46,785, and those received by DAWASCO were 15,923. As shown in Figure 3.11 most of the complaints were on billing issues followed by meter reading and leakages.

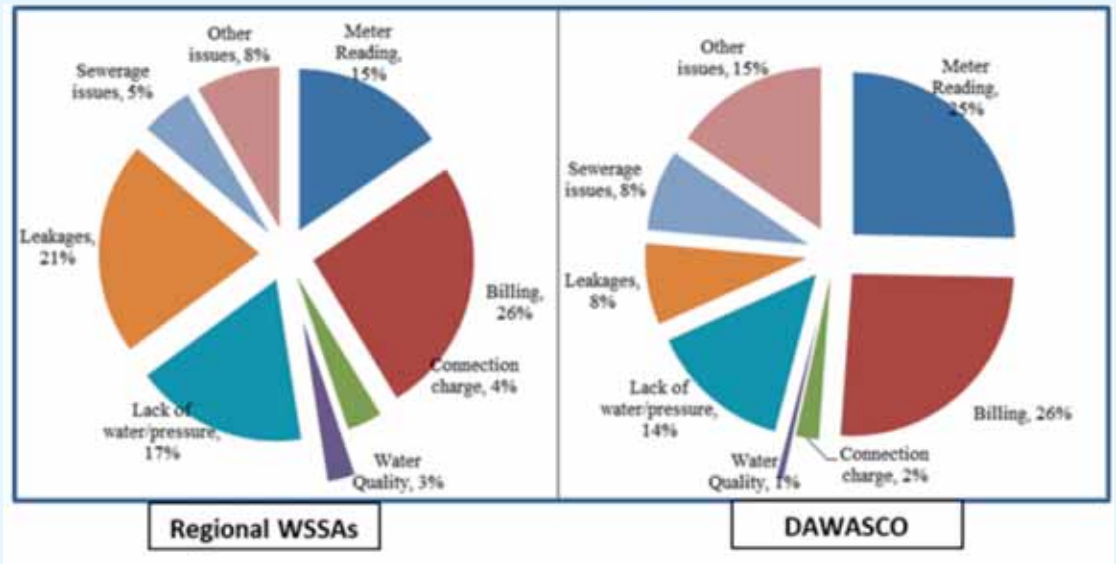


Fig. 3.11: Percentage of complaints received by Regional WSSAs and DAWASCO

- ❖ Both Regional WSSAs and DAWASCO had most of the received complaints (26% of the total complaints) on billing issues. These results suggest that water utilities should review their billing processes so as to reduce the complaints thereof.

3.9 Staff per 1000 water and sewerage connections

This indicator measures staff productivity based on average number of staff per 1000 customers. During the reporting period, Regional WSSAs had an average of 7 staff serving 1000 connections, the same level that was reported in 2011/12. DAWASCO has increased its staff per 1000 connection ratio from 5.8 reported in 2011/12 to 6.2 in 2012/13. The performance benchmark for this indicator should be less or equal to 5 staff per 1000 water and sewerage connections. The details of the total number of staff and the trends of staff per 1000 water and sewerage connections over the three years period for the Regional WSSAs and DAWASCO is presented in Appendix 2: Table A2.18 and illustrated in Figure 3.12 below.

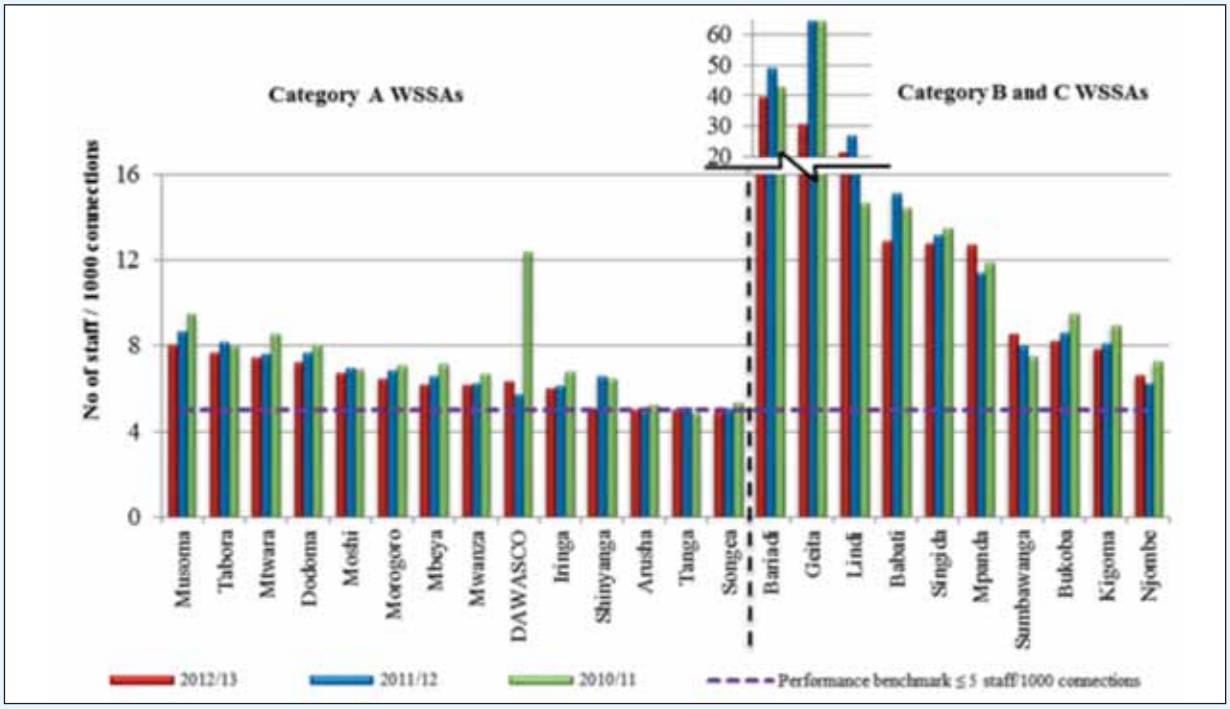


Figure 3.12: Number of staff per 1000 water and sewerage connections

- ❖ Songea, Tanga and Arusha WSSAs reported the lowest ratios of staff per 1000 water and sewerage connections and eventually attained the performance benchmark.

- ❖ The high staff per 1000 connection figures reported by Lindi, Geita and Bariadi WSSAs is due to the small customer base in the these utilities.

- ❖ DAWASCO's number of staff per 1000 connections slightly increased from 5.8 reported in 2011/12 to 6.4 in 2012/13. This unsatisfactory trend is attributed to the increase in number of staff from 894 in 2011/12 to 943 in 2012/13 while the number of water and sewerage connections decreased during the same period. Despite the deterioration, DAWASCO's level of staff productivity is generally better than the overall average of 7.0 staff per 1000 connections for Regional WSSAs in 2012/13.

3.10 Billing and Revenue Collection Performance

The billing and revenue collection performance is explained by analyzing three indicators, namely collection efficiency, accounts receivable, and Overall Efficiency Indicator (OEI).

(a) Collection Efficiency

Collection efficiency measures the ability of WSSAs to collect the billed amount from water supply and sewerage services during a year. A higher collection efficiency reflects a better performance. In 2012/13, WSSAs' collection efficiency averaged 89.2%, which is

an improvement from 77.2%, achieved in 2011/12. Fig. 3.13 presents WSSAs collection efficiencies from 2010/11 to 2012/13.

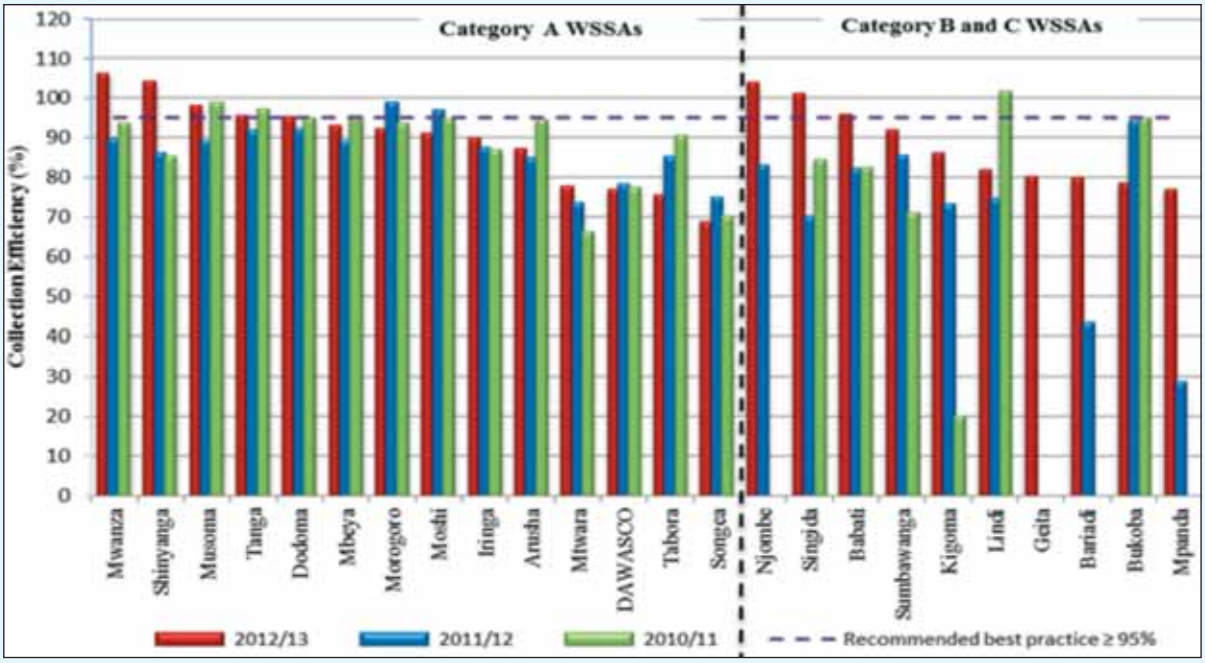


Fig. 3.13: Collection Efficiency

- ❖ Mwanza, Shinyanga, Njombe, Singida and Musoma WSSAs were the best performers in 2012/13 after achieving collection efficiencies of more than 98.1% with Songea WSSA being the least performer with a collection efficiency of 68.8%.

- ❖ The low collection efficiency for Songea and Tabora WSSAs was attributable mainly to non-payment by Public institutions.

- ❖ It should be noted that some utilities have billing softwares that could not separate arrears from current year's collections. This led to relatively high records of collection efficiencies for utilities such as Mwanza, Shinyanga, Njombe, Singida and Musoma WSSAs.

- ❖ For DAWASCO, revenue collection efficiency decreased to 76.9% as compared to 78.3% achieved in 2011/12 during the year 2012/13.

(b) Accounts Receivable Ratio

Accounts receivable indicates the extent of arrears which are due to the utility. It is measured in terms of months of water and sewerage billings. An accounts receivable amount equivalent to less than two months of the billing is regarded as best practice. On average, accounts receivable declined in performance from 2.4 months in 2011/12 to 2.9 in 2012/13.

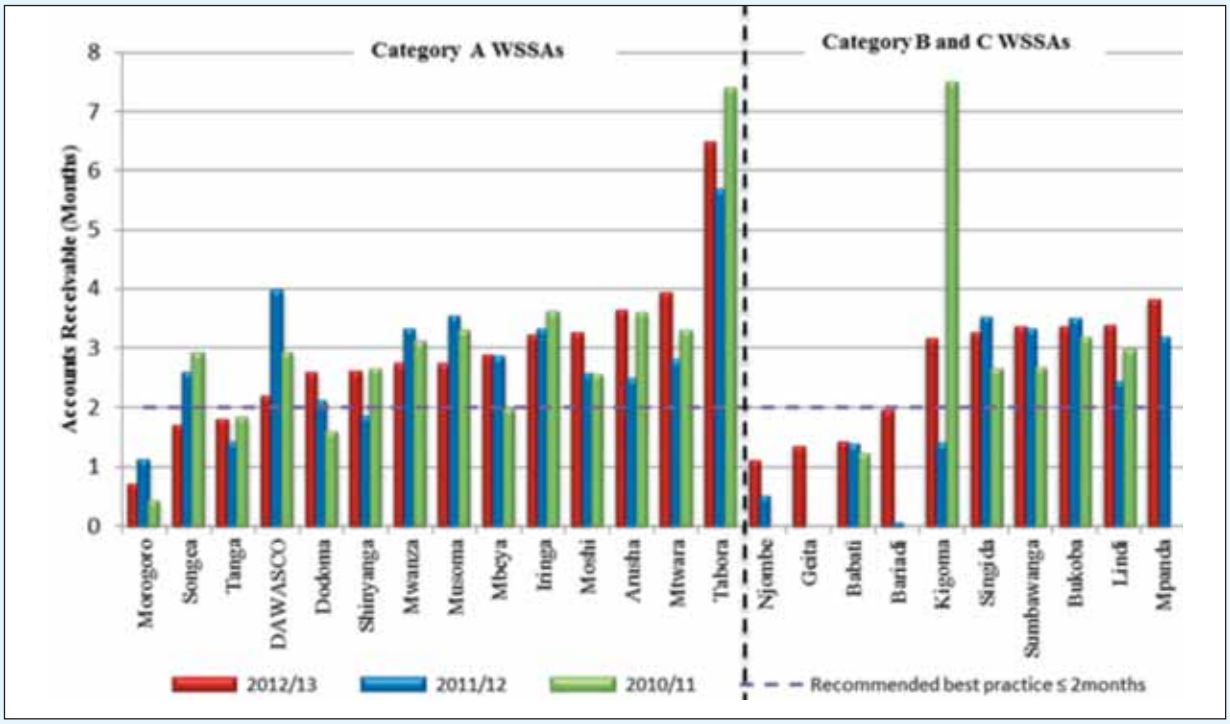


Fig. 3.14: Accounts Receivable

- ❖ Morogoro, Njombe, Geita, Babati and Songea WSSAs were the best performers in 2012/13 after recording accounts receivable ratio of less than 2 months with Tabora and Mtwara WSSA being the least performers with an accounts receivable ratio of 6.5 and 3.9 months, respectively.

- ❖ Kigoma WSSA had huge accounts receivable ratio during 2010/11. The Utility provided for doubtful debt amounting to TZS 117.3 million during 2011/12 which was about 50% of total receivables it had during 2010/11. Despite this measure the accounts receivable ratio has increased from 1.4 months to 3.1 months in 2011/12 and 2012/13, respectively.

- ❖ DAWASCO's accounts receivable stood at 2.2 months of its annual billing during 2012/13 which is an achievement compared to 4.0 months reported in 2011/12. This DAWASCO's performance was also better compared to the 2.9 months average accounts receivable reported by regional WSSAs in 2012/13. DAWASCO explained that the accounts receivable improved due to the increase in the provision for doubtful debts from TZS 3.9 billion in 2011/12 to TZS 6.7 billion in 2012/13.

(c) Overall Efficiency Indicator (OEI)

The Overall Efficiency Indicator (OEI) is driven by two key indicators namely collection efficiency and Non-Revenue Water (NRW). It is given as actual collection expressed as a percentage of the value of total water production. In other words, OEI equals collection efficiency multiplied by billed volume of water as a percentage of water production volume. For Utilities with collection efficiencies above 100%, a 100% collection efficiency is assigned to them. The recommended OEI should be more than 76% by considering NRW of 20% and collection efficiency of 95%. During 2012/13, the OEI for utilities ranged between 36.7% and 78.0%. On average, in 2012/13, the EOI improved to 57% compared to 50.5% registered in 2011/12.

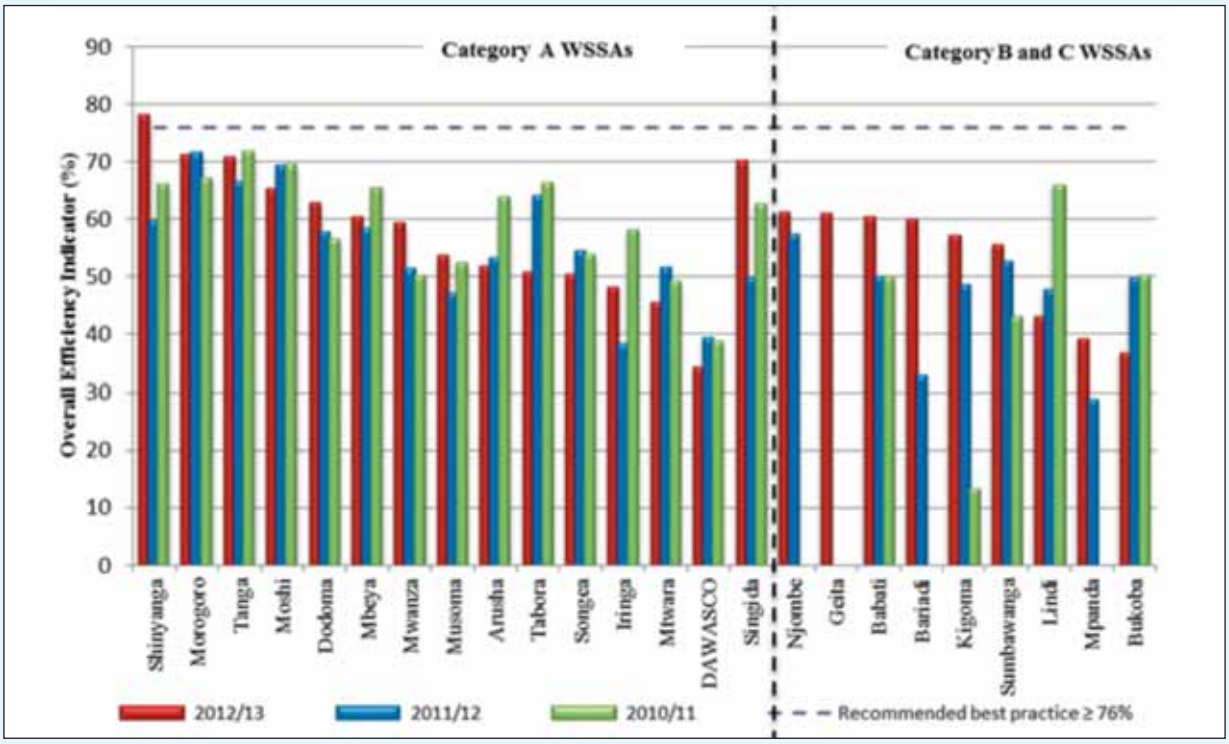


Fig. 3.15: Overall Efficiency Indicator

- Shinyanga WSSA (78.0%), Morogoro WSSA (71.2%), Singida WSSA (70.8%), Tanga WSSA (70.8%) and Moshi WSSA (65.2%) were the overall efficient utilities in 2012/13 while Bukoba WSSA was the least efficient, with an overall efficiency indicator of 36.7%. Only Shinyanga WSSA attained the recommended OEI.

- Bukoba WSSA's poor performance in the Overall efficiency indicator is due to high NRW which during 2012/13 stood at 53.39%.

- Despite the relatively good performance recorded by Morogoro and Moshi WSSAs in 2012/13, the utilities could not achieve the performance levels they recorded in 2011/12.

- During the year under review, there was an improvement in OEI for Shinyanga, Singida, Tanga, Njombe, Mwanza, Dodoma, Geita, Babati, Mbeya, Bariadi, Kigoma, Sumbawanga, Musoma and Iringa WSSAs compared to the achievement in 2011/12.

- During 2012/13, OEI for DAWASCO was 34.2% which is a decrease compared to 39.4% reported in 2011/12. However, this is below the regional WSSAs average of 57.5% in 2012/13. The decline in terms of OEI for DAWASCO was mainly due to both a decrease in collection efficiency from 78.3% in 2011/12 to 76.9% in 2012/13 and an increase in NRW from 49.8% in 2011/12 to 55.5% in 2012/13.

4.0 FINANCIAL OPERATIONS

4.1 Revenue Generation

The revenue from the water and sewerage services is the core and most stable source of income for WSSAs in order to meet Operation and Maintenance (O&M) costs, as well as infrastructural investment costs. Thus, the sustainability of a utility is mainly dependent on its ability to correctly bill its customers from the water and sewerage services it renders and to collect the billed amount efficiently.

Table 4.1: Revenue Generation for Regional WSSAs (In Million TZS)

		2010/11	2011/12	2012/13
Category A	Water Billing	35,190.78	42,827.47	50,584.40
	Sewerage Billing	1,957.11	2,573.76	3,243.79
	Other Operating Revenues	6,523.30	8,545.60	8,572.06
	Total Category A	**43,671.18**	**53,946.83**	**62,400.25**
Category B & C	Water Billing	2,899.34	3,820.17	5,282.09
	Sewerage Billing	-	-	-
	Other Operating Revenues	525.96	803.78	1,002.32
	Total Category B & C	**3,425.30**	**4,623.95**	**6,284.41**
Total	Water Billing	38,090.12	46,647.65	55,866.48
	Sewerage Billing	1,957.11	2,573.76	3,243.79
	Other Operating Revenues	7,049.26	9,349.37	9,574.38
	GRAND TOTAL	**47,096.48**	**58,570.77**	**68,684.66**

Table 4.1 reveals that in 2012/13, revenue billing trends for all WSSAs improved considerably compared to 2011/12. During the above mentioned period, water billing for category A WSSAs rose from TZS 46.6 billion to TZS 55.9 billion, while sewerage billing rose from TZS 2.6 billion to TZS 3.2 billion, and other operating revenues rose slightly from TZS 9.3 billion to TZS 9.6 billion, respectively. The improved performance is attributable to an overall increase in the water production mainly as a result of an increase in the customer base. DAWASCO's composition of operating revenues included water sales from operator tariff which amounted to TZS 40.4 billion (88.0%), sales from sewerage operator tariff which amounted to TZS 4.2 billion (9.1%), and other operating revenues which amounted to TZS 1.3 billion (2.8%).

4.2 Total Revenue Collection Trend

Unless the billed amount is collected, WSSAs will find it difficult to become financially stable. A stable and an improved cash flow from water and sewerage services is vital for each utility's sustainability in service delivery. In 2012/13, total revenue collections increased by 20.1% to TZS 62.5 billion from TZS 52.0 billion registered in 2011/12. Fig. 4.1 presents WSSAs' performance in revenue collection from 2010/11 to 2012/13.

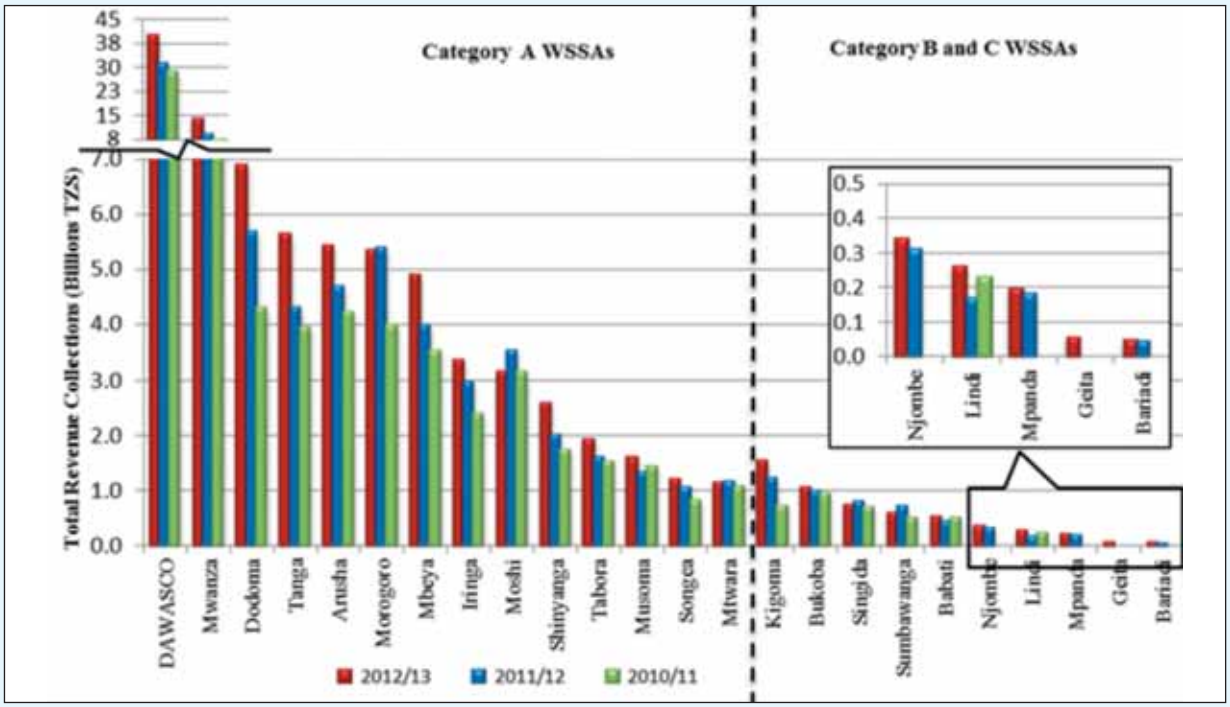


Fig. 4.1: Total Revenue Collections

- Mwanza WSSA continued to register the highest revenue collection in 2012/13 collecting TZS 14.0 billion with Bariadi WSSA being the least revenue collector collecting TZS 46.0 million. Mwanza WSSA has also recorded the highest increase in revenue collection which is mainly attributed to the adoption of mobile phone payment in collection of its revenues.

- In 2012/13, Morogoro, Moshi, Mtwara, Singida and Sumbawanga WSSAs' revenue collection declined mainly due to the decrease in collection efficiencies. Further, in Moshi WSSA, the volume of water produced declined, thus decreasing the billed volume.

- For DAWASCO, revenue collection increased from TZS 30.9 billion in 2011/12 to 39.7 billion during the reporting period. The increase is attributed to the increase in the water and sewerage operator tariff which came into effect from 1st July 2012, and the application of mobile payment technology in revenue collection.

4.3 Expenditure and Budget Control

4.3.1 Operating Cost per Unit of Water Produced

Operating costs per unit of water produced establishes all operating costs associated with production of a unit of water. It considers total operating costs exclusive of depreciation. In 2012/13, on average, the operating costs per unit of water produced increased to TZS 578.7 per m^3 from TZS 490.8 per m^3 reported in 2011/12. Given, an average tariff in use of TZS 664.5 per m^3 during 2012/13, this implies that most of the regional WSSAs were able to cover at least O&M costs excluding depreciation.

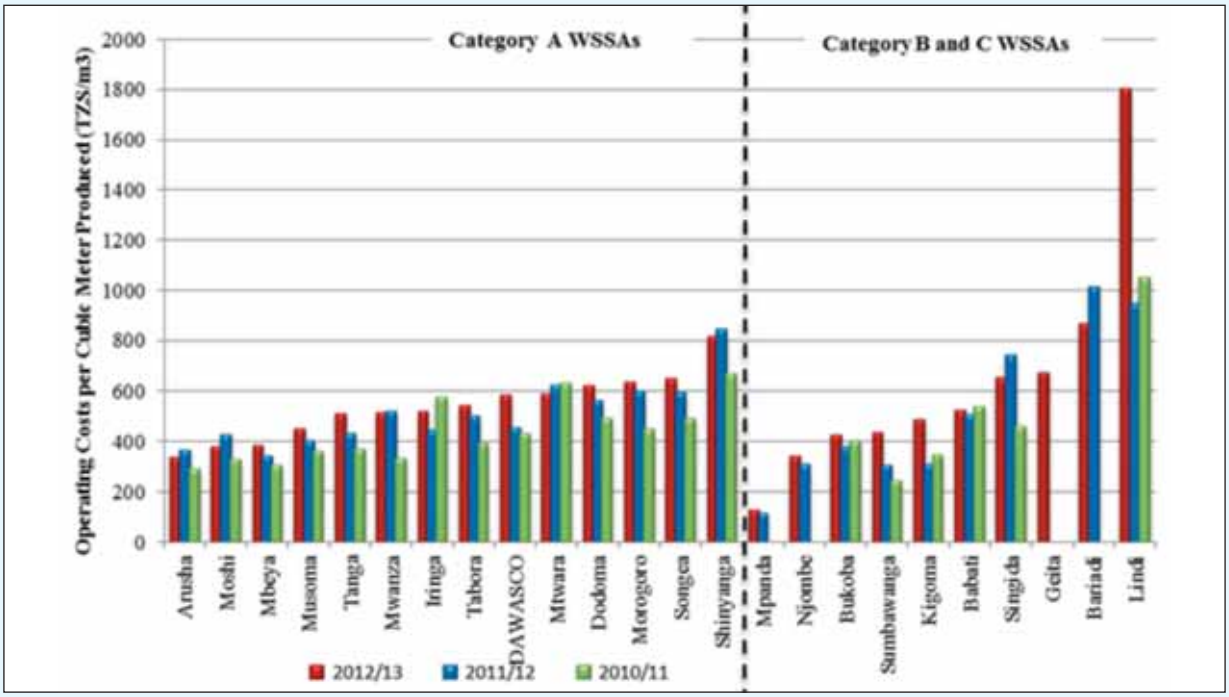


Fig. 4.2: Total Costs per unit of water produced

- In 2012/13, the top five WSSAs in terms of low operating costs per unit of water production were Mpanda (TZS 125.8), Arusha (TZS 340.9), Njombe (TZS 343.1), Moshi (TZS 382.1) and Mbeya (TZS 383.4) while the top five WSSAs in terms of high operating costs per unit of water production were Lindi (TZS 1,799.2), Bariadi (TZS 868.5), Shinyanga (TZS 814.1), Geita (TZS 673.4) and Singida (TZS 657.9).

- The significant increase in operating costs for Lindi WSSA is attributed to increased water production, personnel and administration costs. The increase in water production costs were

due to increased electricity costs after completion of the water project. The personnel costs increased due to a review of salaries and allowances. The higher administration costs were due to spending on some administrative cost items which in previous year were left due to insufficient revenues. It should be noted also that during the period under review, Lindi WSSA had their tariff adjusted from an average of TZS 700 per m^3 to TZS 900 per m^3.

- ❖ Total costs per unit of water produced increased during 2012/13 compared to 2011/12 for Dodoma, Tanga, Morogoro, Mbeya, Iringa, Tabora, Musoma, Kigoma, Bukoba, Sumbawanga, Babati and Njombe WSSAs.

- ❖ In contrast, total costs per unit of water produced decreased during 2012/13 for Mwanza, Arusha, Moshi, Shinyanga, Songea, Mtwara and Singida WSSAs compared to the 2011/12 performance.

- ❖ For DAWASCO, the total O&M costs per cubic meter of water produced increased to TZS 587.2 during 2012/13 compared to TZS 453.7 per cubic meter recorded in 2011/12. DAWASCO's total O&M costs per cubic meter of water produced was more than TZS 578.7 per m^3, the average registered by other regional WSSAs.

4.3.2 Production Cost

Energy Cost Per Unit of Water Produced

Energy costs per unit of water produced is the proportion of energy costs (that is, electricity costs for production and distribution) to the total production volume. The intensity of energy costs is largely determined by the technology of the water supply system used including the type of water sources utilized, and method of abstraction, production and distribution. Moreover, energy costs per unit of water produced is largely influenced by the design and the level of efficiency of the pumping infrastructure.

In 2012/13, the energy costs for utilities ranged from TZS 0.2 to TZS 356.6 per m^3. In 2012/13, except for Lindi, Dodoma, Mwanza, Tabora, Singida, Bariadi, Musoma, Iringa, Kigoma, Mtwara and Babati WSSAs, the energy cost for most utilities was less than TZS 100 per m^3. The overall average energy costs for all utilities stood at TZS 98.2 per m^3 of water produced increasing from TZS 76.7 per m^3 recorded in 2011/12.

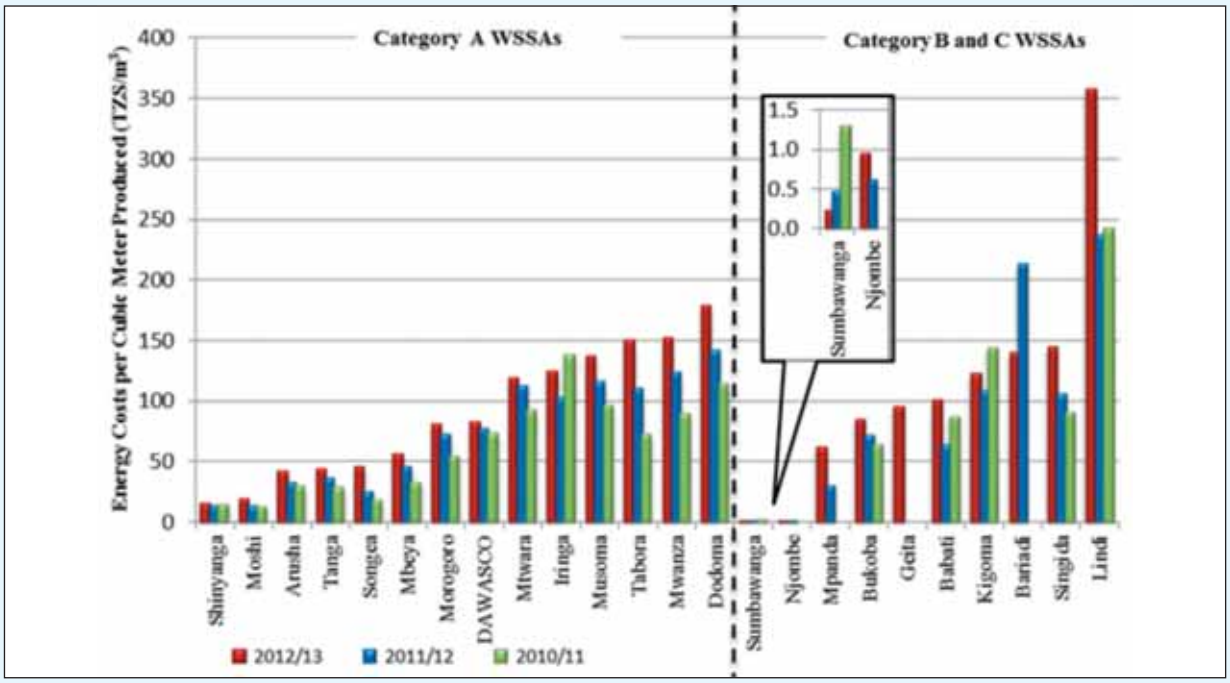


Fig. 4.3: Energy Costs per unit of water produced

- In 2012/13, Sumbawanga, Njombe, Shinyanga, Moshi, and Arusha WSSAs were the least energy costs utilities with Lindi, Dodoma, Mwanza, Tabora and Singida WSSAs recording high energy costs per unit of water produced.

- Energy costs per unit of water produced for Dodoma, Mwanza, Tabora, Singida, Musoma, Dodoma, Mwanza, Tabora, Singida and Musoma WSSAs have been high and ever-increasing for the past three years.

- For DAWASCO, energy costs increased to TZS 81.7 per m^3 during the reporting period from TZS 76.4 per m^3 recorded in 2011/12. DAWASCO's energy costs were less than the average energy costs of TZS 98.2 per m^3 for other regional WSSAs.

Chemical Cost per Unit of Water Produced

Generally, chemical consumption tends to be relatively higher with surface water sources than with ground water sources. During 2012/13, chemical costs for utilities ranged from TZS 0.2 to TZS 98.2 per m^3. In 2012/13, on average, chemical costs for utilities decreased slightly to TZS 17.0 per m^3 from TZS 17.8 per m^3 recorded in 2011/12.

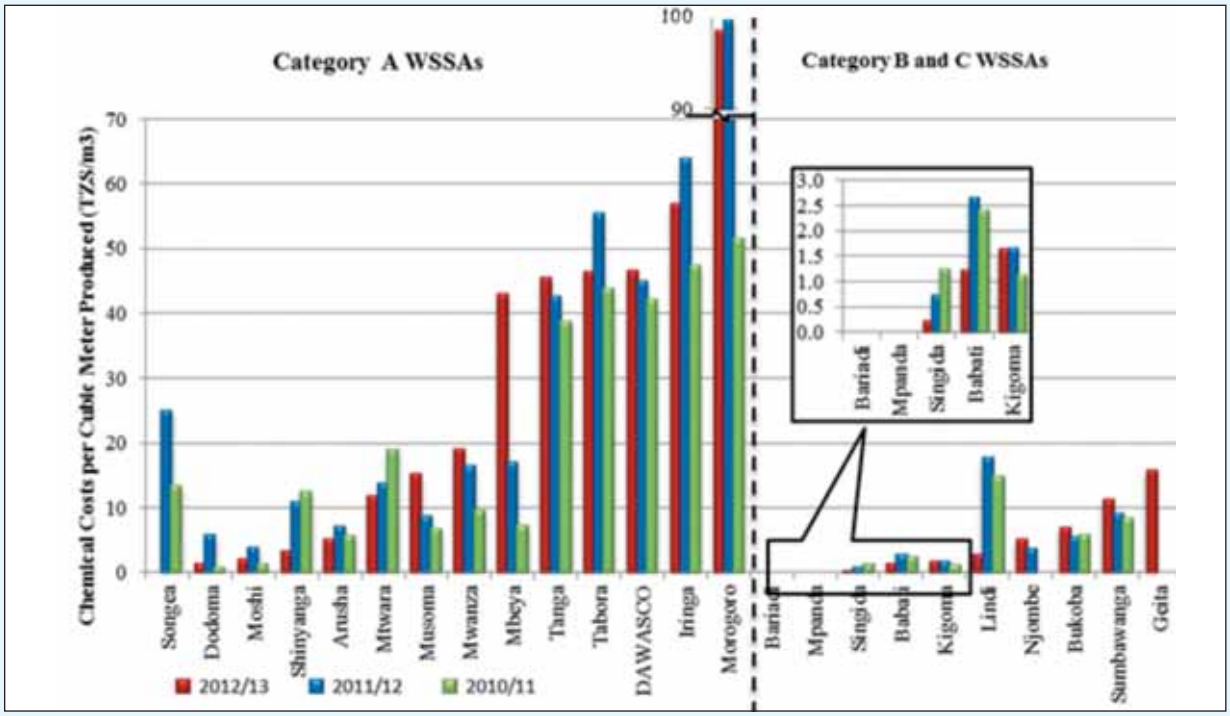


Fig. 4.4: Chemical Costs per Cubic Metre

- In 2012/13, Morogoro, Iringa, Tabora, Tanga and Mbeya WSSAs registered relatively high chemical costs per m^3. All these utilities depend largely on surface water sources for their raw water abstraction. In addition, Tanga WSSA reported to have introduced the usage of Poly Aluminium Chloride (PAC) which is relatively expensive, as a supplement to the normal Aluminium Sulphate in a bid to further improve the quality of water produced.

- Chemical costs per m^3 for Tanga, Mbeya, Mwanza, Musoma, and Sumbawanga WSSAs have been increasingly high since 2010/11.

- Similarly, DAWASCO's chemical costs per unit of water produced increased during 2012/13. Chemical costs increased from TZS 44.8 per m^3 during 2011/12 to TZS 46.4 per m^3 in 2012/13. DAWASCO's chemical costs per m^3 were high compared to other regional WSSAs which had an average of TZS 17.0 per m^3. DAWASCO indicated in their report that the increase in chemical costs was linked to the use of expensive disinfectant, calcium hypochlorite, instead of chlorine gas due to transportation problems

4.3.3 Personnel Cost

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

Personnel Cost per Unit of Water Produced

During 2012/13, personnel costs for utilities ranged between TZS 51.4 and TZS 409.1 per m^3 of water produced. On average, in 2012/13, personnel costs per unit of water produced for all regional utilities increased to TZS 204.9 per m^3 from TZS 172.0 per m^3 recorded in 2011/12.

Generally, Category B and C WSSAs tend to have higher personnel costs per unit of water produced than Category A WSSAs. During 2012/13, they recorded an average of TZS 224.4 per m^3 compared to TZS 189.9 per m^3 recorded by Category A WSSAs.

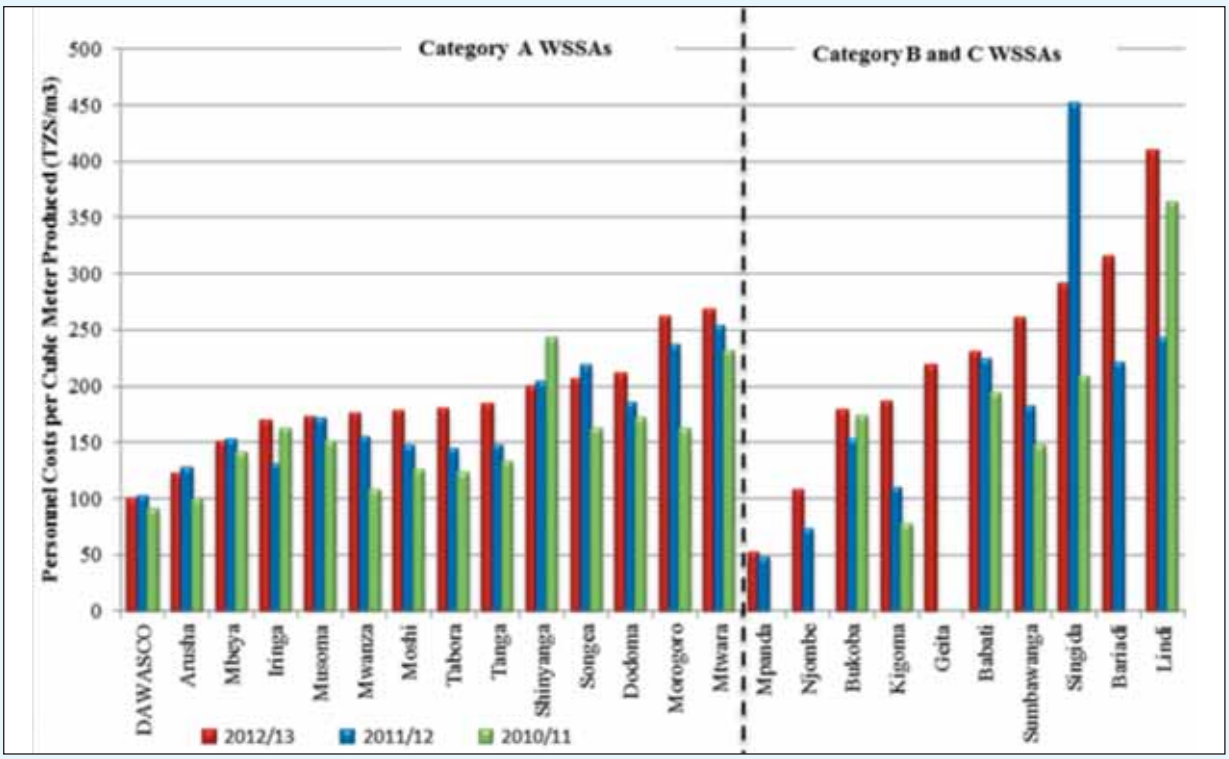


Fig. 4.5: Personnel Costs per cubic metre of water produced

- In 2012/13, Lindi, Bariadi, Singida, Mtwara, Morogoro and Sumbawanga WSSAs registered relatively high personnel costs per m^3 while Mpanda, Njombe, Arusha, and Mbeya and Iringa WSSAs registered relatively low personnel costs per m^3.

- Despite the fact that high personnel costs per cubic meter produced are normal under Category B and C WSSAs, Mpanda WSSAs recorded the least personnel costs per cubic meter produced at TZS 51.4 per cubic meter.

- Lindi WSSA personnel costs almost doubled between 2011/12 and 2012/13 from TZS 241.4 to TZS 409.1 per m^3 following the increase in salaries of its staff. On the other hand, Singida WSSA's personnel costs dropped from TZS 450.4 to TZS 290.1 per m^3 due to the decision by the Utility to cut down personnel costs due to a decrease in revenue collection during the year and its effort to improve the ratio of personnel costs per revenue collections towards the 30% target.

- DAWASCO's performance with regard to personnel costs per unit of water produced during 2012/13 was better than during the previous year. Personnel costs per unit of water produced

stood at TZS 98.9 per m^3 which is a decrease compared to TZS 101.8 per m^3 recorded in 2011/12. This is significantly better than TZS 204.9 per m^3 which is the average for the regional water utilities. This performance is attributed to the increase in water production volume during the reporting period.

Personnel Cost as a Percentage of Revenue Collection

Personnel costs as percentage of revenue collections shows the proportion of total revenue collections spent to meet personnel costs. It considers revenue collections from internal sources exclusive of arrears. Generally, the lower the percentage the better the performance.

During 2012/13, personnel costs as a percentage of revenue collections ranged between 24.1% and 97.1%. This represents an average of about 45.9% during 2012/13 which is an increase compared to 41.6% registered in 2011/12.

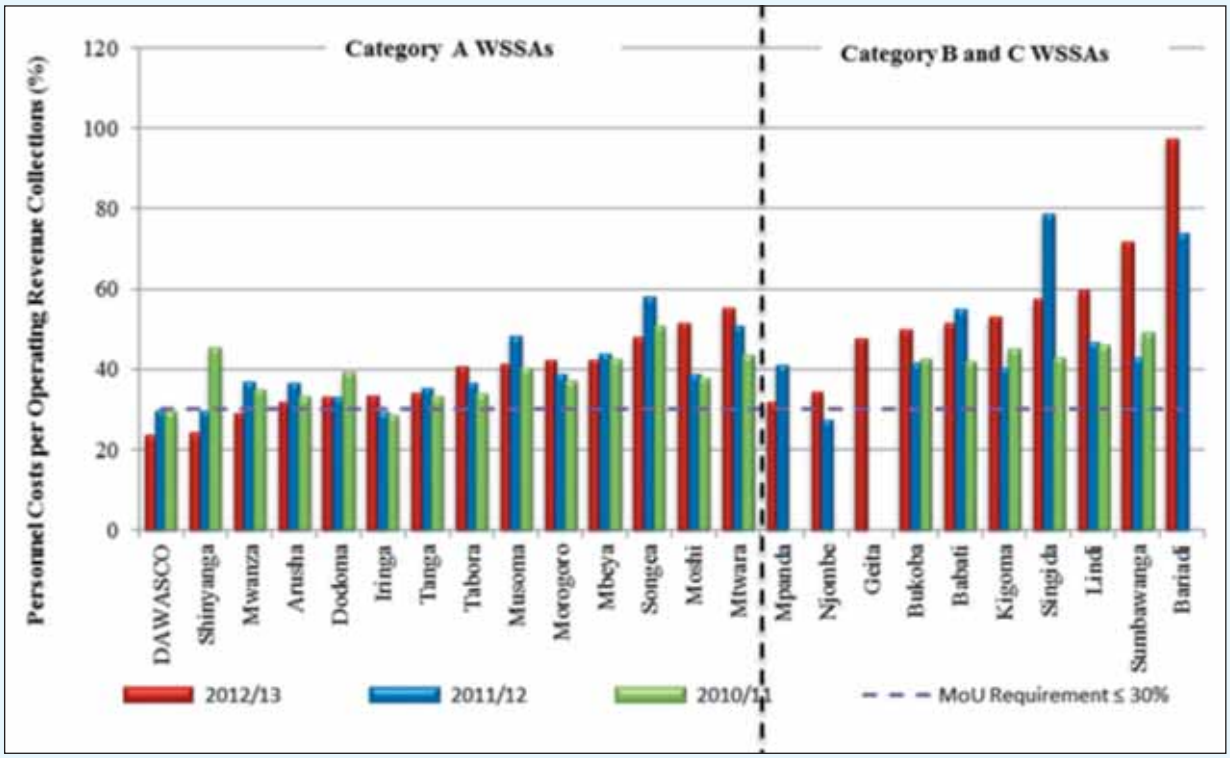


Fig. 4.6: Personnel Costs as a percentage of Revenue collections

- In 2012/13 only Mwanza and Shinyanga WSSA registered personnel costs as a percentage of revenue collections of below 30% as required by MoU between WSSAs and the Ministry of Water. Meanwhile, Bariadi, Sumbawanga, Lindi, Singida WSSAs had the highest ratio of personnel costs as a percentage of revenue collections, which was also reported with a significant increase during the reporting year.

- Musoma, Songea, Tanga, Arusha and Mpanda WSSAs have improved their personnel costs as a percentage of revenue collections towards the 30% benchmark through improved revenue collections.

- Under Category A Utilities, Moshi and Mtwara WSSAs could not perform well in terms of their personnel costs as a percentage of revenue collections towards the 30% benchmark through improved revenue collections. Moshi WSSA, for example, has their ratio increased from 38.7% to 51.2% from 2011/12 to 2012/13, while the ratio for Mtwara WSSA increased from 50.4% to 55.1% during the same period. Moshi WSSA has reported that the increase in the ratio is mainly due to the review of its staff remunerations. Meanwhile, Mtwara WSSA reported to have recruited five senior staff and a team of casual laborers to curb the NRW.

- Under Category B and C Utilities, only Babati, Singida and Mpanda WSSAs managed to decrease the personnel costs as a percentage of revenue collections from 54.7% to 51.1% (for Babati WSSA), from 78.3% to 57.1% (for Singida WSSA) and from 40.7% to 31.7% (for Mpanda WSSA).

- For DAWASCO, personnel costs as a percentage of collections from water, sewerage and related services decreased compared to the previous year. Personnel costs improved from 29.5% recorded in 2011/12 to 23.4% in 2012/13, mainly due to the increase in the total revenue collections during the reporting period.

4.3.4 Administrative Cost

Administration costs are regarded as indirect costs as they are not directly linked to water production. As these costs increase, a Utility deviates from the core business of providing water and sewerage services.

During 2012/13, administration costs for all utilities ranged between TZS 16.5 and TZS 406.8 per m^3. In 2012/13, on average, administration costs per unit of water production for all utilities increased to TZS 132.8 per m^3 compared to TZS 101.6 per m^3 recorded in 2011/12.

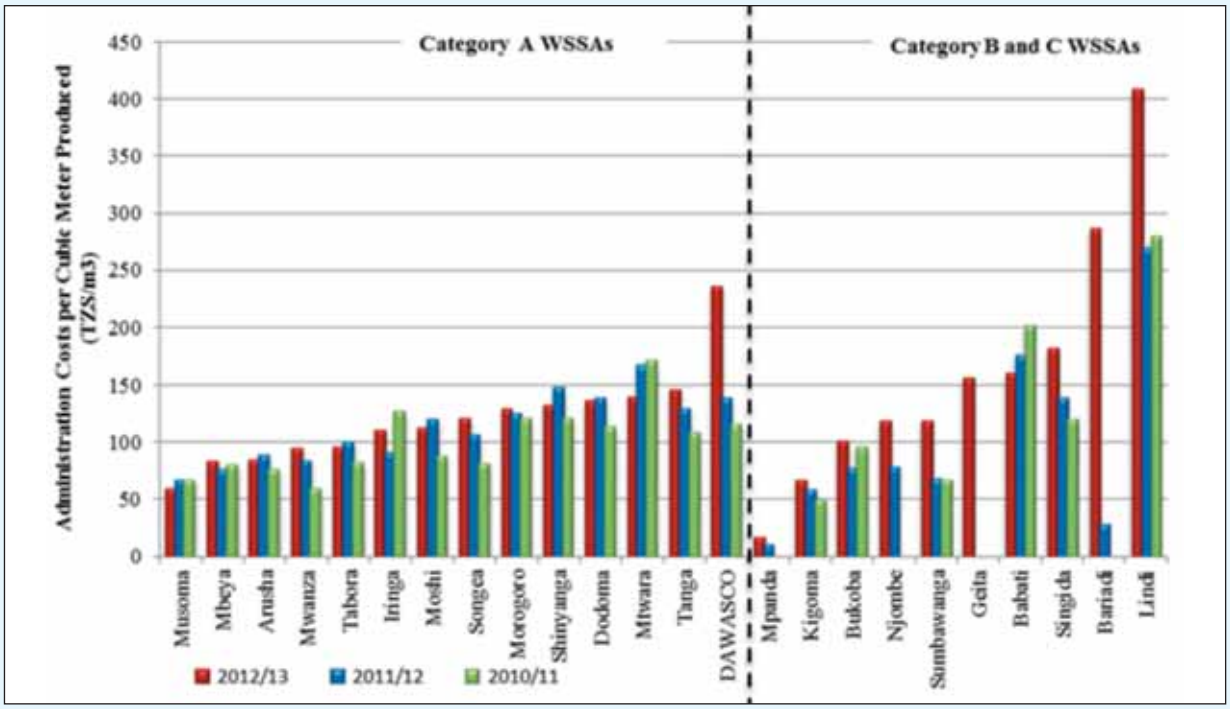


Fig. 4.7: Administration Costs per cubic metre of water produced

- In 2012/13, Mpanda WSSA (TZS 16.5), Kigoma WSSA (TZS 67.1), Musoma WSSA (TZS 59.1), Mbeya (TZS 83.2), Arusha WSSA (TZS 84.0), Mwanza WSSA (TZS 94.2), Tabora WSSA (TZS 95.9), Bukoba WSSA (TZS 101.1), and Moshi WSSA (TZS 112.1) registered low administration costs per unit of water production.

- The higher administration cost per unit of water production were registered by Lindi WSSA (TZS 406.8), Bariadi WSSA (TZS 285.3), Singida WSSA (TZS 181.1), Babati WSSA (TZS 160.3) and Geita WSSA (TZS 155.7).

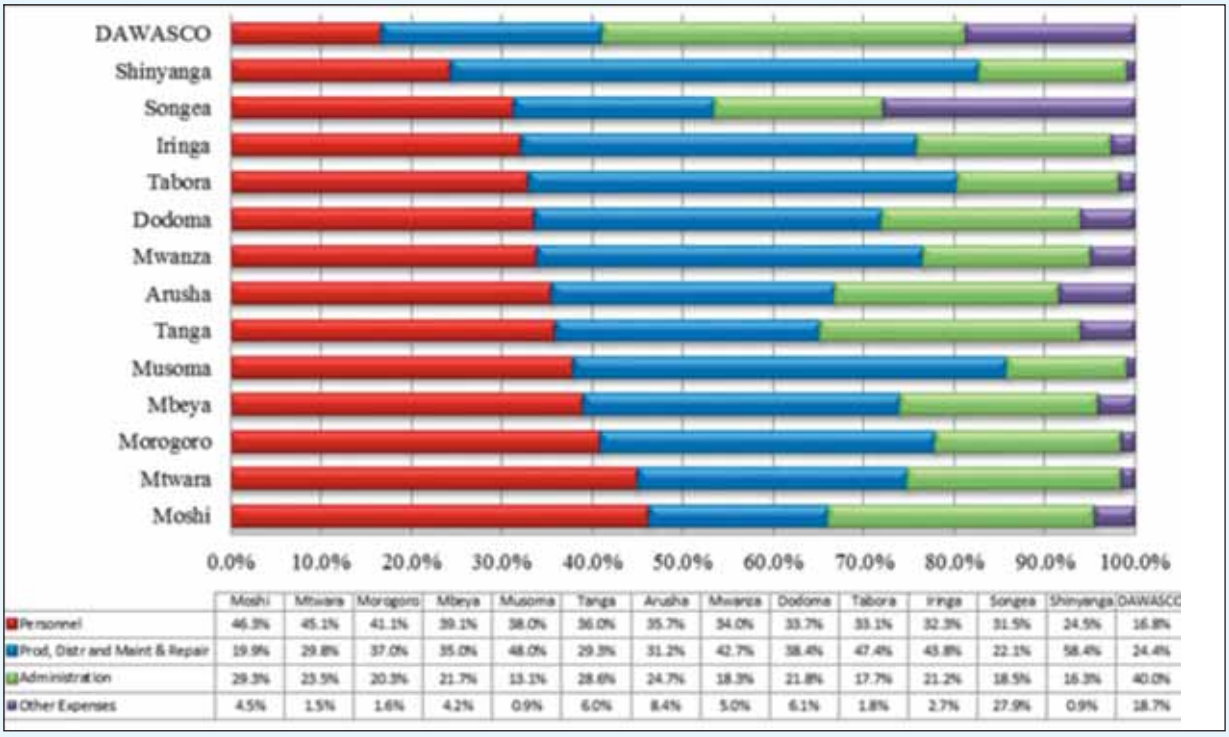
- For DAWASCO, administration costs are measured in terms of cost per unit of water produced. During 2012/13, administration costs for DAWASCO increased from TZS 138.4 per m^3 recorded in 2011/12 to TZS 234.8 per m^3. This is higher than the average administrative costs of TZS 132.8 per m^3 recorded in 2012/13 by the regional WSSAs.

4.3.5 Cost Structure

Composition of O&M Cost (Excluding Depreciation)

During 2012/13, on average, regional utilities' O&M costs excluding depreciation were composed of water production, distribution, maintenance and repair costs (34.8%), administration costs (22.8%), personnel costs (37.4%), and other costs (5.0%).

For Category A WSSAs, on average, O&M costs consisted of production, distribution and maintenance and repair costs (37.2%), administration costs (21.2%), while personnel cost was 36.2%. The 2012/13 cost composition is more or less similar to that recorded in 2011/12.



	Moshi	Mtwara	Morogoro	Mbeya	Musoma	Tanga	Arusha	Mwanza	Dodoma	Tabora	Iringa	Songea	Shinyanga	DAWASCO
Personnel	46.3%	45.1%	41.1%	39.1%	38.0%	36.0%	35.7%	34.0%	33.7%	33.1%	32.3%	31.5%	24.5%	16.8%
Prod, Distr and Maint & Repair	19.9%	29.8%	37.0%	35.0%	48.0%	29.3%	31.2%	42.7%	38.4%	47.4%	45.8%	22.1%	58.4%	24.4%
Administration	29.3%	23.5%	20.3%	21.7%	13.1%	28.6%	24.7%	18.3%	21.8%	17.7%	21.2%	18.5%	16.3%	40.0%
Other Expenses	4.5%	1.5%	1.6%	4.2%	0.9%	6.0%	8.4%	5.0%	6.1%	1.8%	2.7%	27.9%	0.9%	18.7%

Fig. 4.8: Composition of O&M Cost (Excluding Depreciation) for Category A WSSAs and DAWASCO

The cost structure performance for Category A WSSAs and DAWASCO shows that:

- In 2012/13, Moshi WSSA (46.3%), had the highest composition of personnel costs out of the total O&M costs while Shinyanga WSSA (24.5%) had the lowest.

  Shinyanga WSSA had the highest proportion of production, distribution, maintenance and repair costs of 58.4% with Moshi WSSA having the lowest at 19.9% compared to other WSSAs in Category A.

- Moshi WSSA had the highest proportion of administration cost (29.3%) while Musoma WSSA had the lowest proportion (13.1%).

- During 2012/13, DAWASCO's composition of O&M costs (excluding depreciation) were production, distribution, maintenance and repair costs (24.4%), administration costs (40.0%), personnel costs (16.8%), and other costs (18.7%).

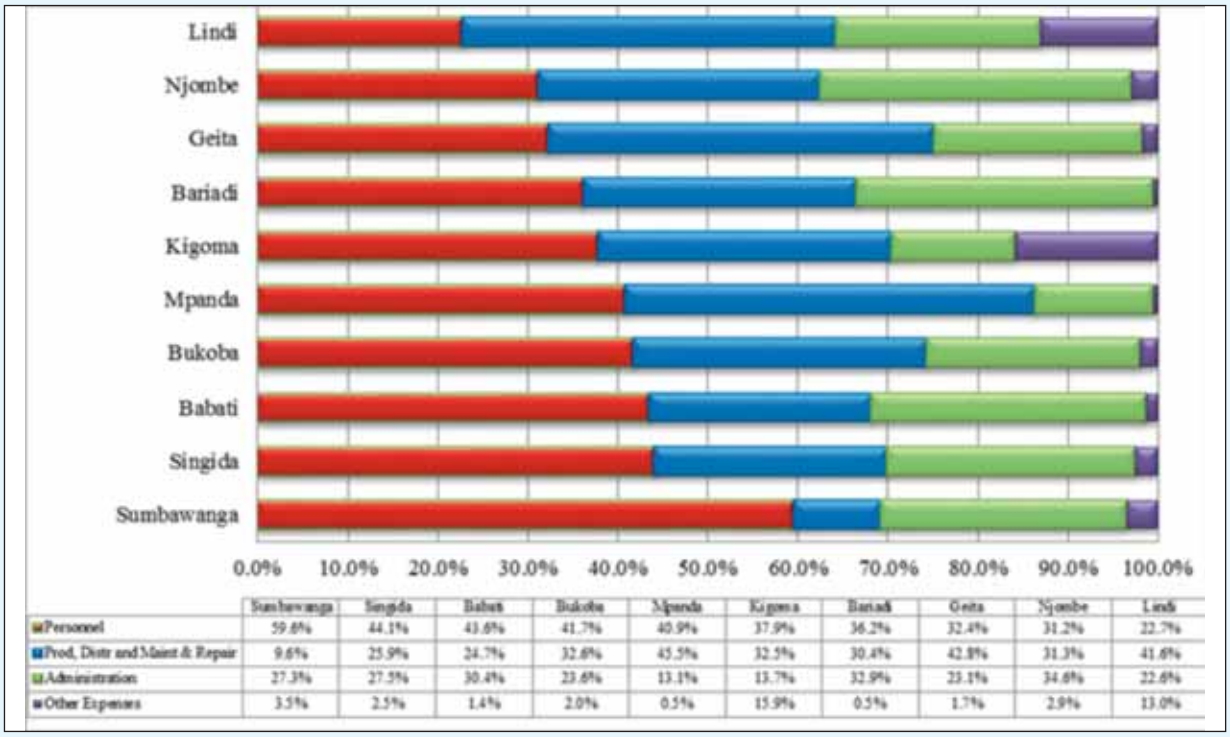


Fig. 4.9: Composition of O&M Cost (Excluding Depreciation) for Category B and C WSSAs

- For Category B and C WSSAs, the distribution of O&M costs was composed of production, distribution, maintenance and repair costs (31.7%), administration costs (24.9%) while personnel costs were 39.0%. Other costs constituted 4.4% of total O&M costs.

- For Category B and C regional WSSAs, in 2012/13 the Mpanda WSSA registered the highest proportion of production, distribution, maintenance and repair costs of 45.5% with Sumbawanga WSSA recording the lowest at 9.6%.

- Sumbawanga WSSA had the highest personnel costs proportion of O&M costs at 59.6% with Lindi WSSA registering the lowest at 22.7%.

- In 2012/13, Njombe WSSA recorded the highest proportion of administration costs with 34.6% while Mpanda WSSA recorded the lowest at 13.1%.

Depreciation versus Other O&M Cost

During 2012/13, on average, regional utilities depreciation costs accounted for 21.0% of the total operating costs, while other O&M costs accounted for 79.0%

For Category A WSSAs, on average, depreciation costs accounted for 21.1%, while other operating costs averaged 78.9%.

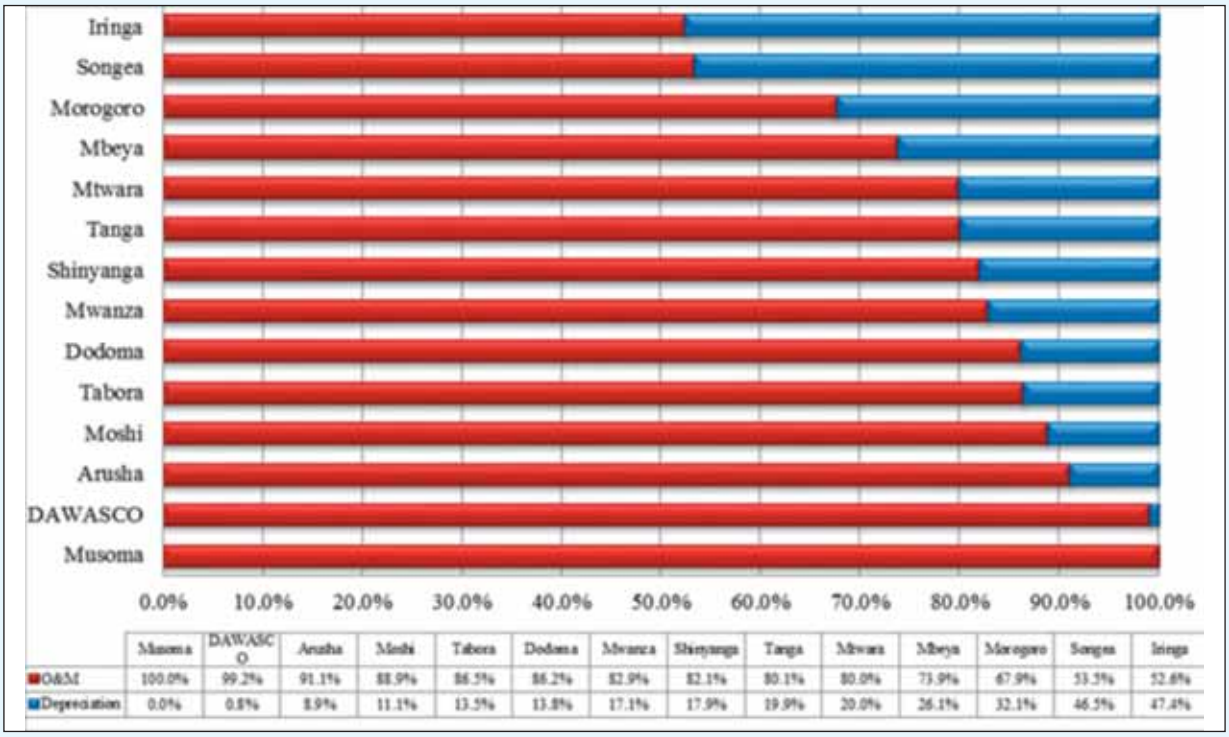


Fig. 4.10: Composition of O&M Cost with Depreciation for Category A WSSAs and DAWASCO

- In 2012/13, Iringa WSSA recorded the highest proportion of depreciation costs at 47.4% while Musoma WSSA recorded the lowest proportion at 0%. The reasons for the two extremes are that while, Iringa WSSA started to depreciate the new assets obtained after the completion of water supply services improvement project, Musoma conducted a revaluation of its assets at the close of the year.

- During 2012/13, DAWASCO's depreciation constituted only 0.8% of the total operating costs whereas other O&M costs constituted 99.2%. The DAWASCO's depreciation proportion is lower than that of Category A WSSAs' average (21.1%) as well as Category B and C WSSAs' average (20.8%). The low depreciation proportion for DAWASCO is due to the fact that most of the assets used for provision of water supply and sewerage services in the DAWASCO's service area are owned by DAWASA.

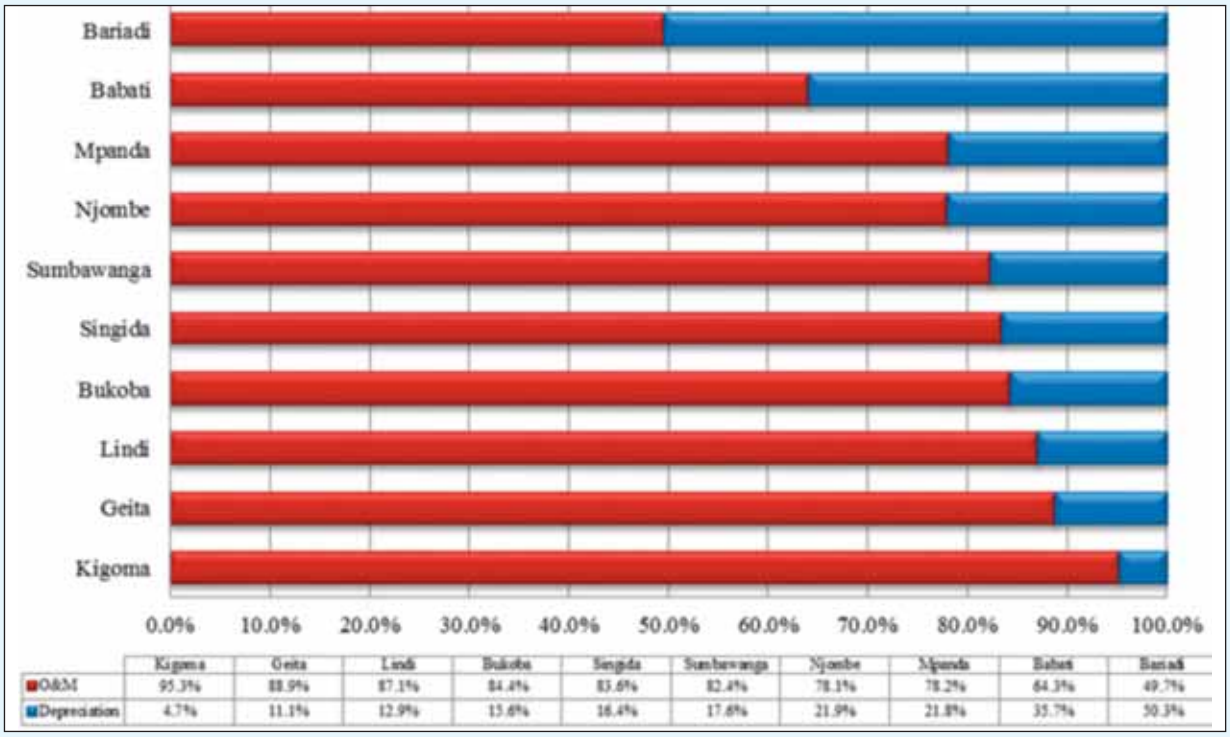


Fig. 4.11: Composition of O&M Costs with Depreciation for Category B & C WSSAs

- For Category B and C WSSAs, on average, depreciation costs accounted for 20.8%, while other O&M costs averaged 79.2%.

- Bariadi WSSA recorded the highest proportion of depreciation costs with 50.3% while Kigoma WSSA recorded the lowest at 4.7%.

4.4 Cost Recovery

4.4.1 Working and Operating Ratio

Both Working and Operating Ratios measure the ability of WSSAs to recover their operational costs from their annual revenues.

Working Ratio (WR)
The Working ratio is calculated by taking the utility's total annual expenses – excluding depreciation and debt related expenses and dividing it with its annual revenue. The recommended ratio should be less than 0.67.

On average in 2012/13, Working Ratio for Regional WSSA was 1.08 which is a decline in performance compared to 1.00 registered in 2011/12.

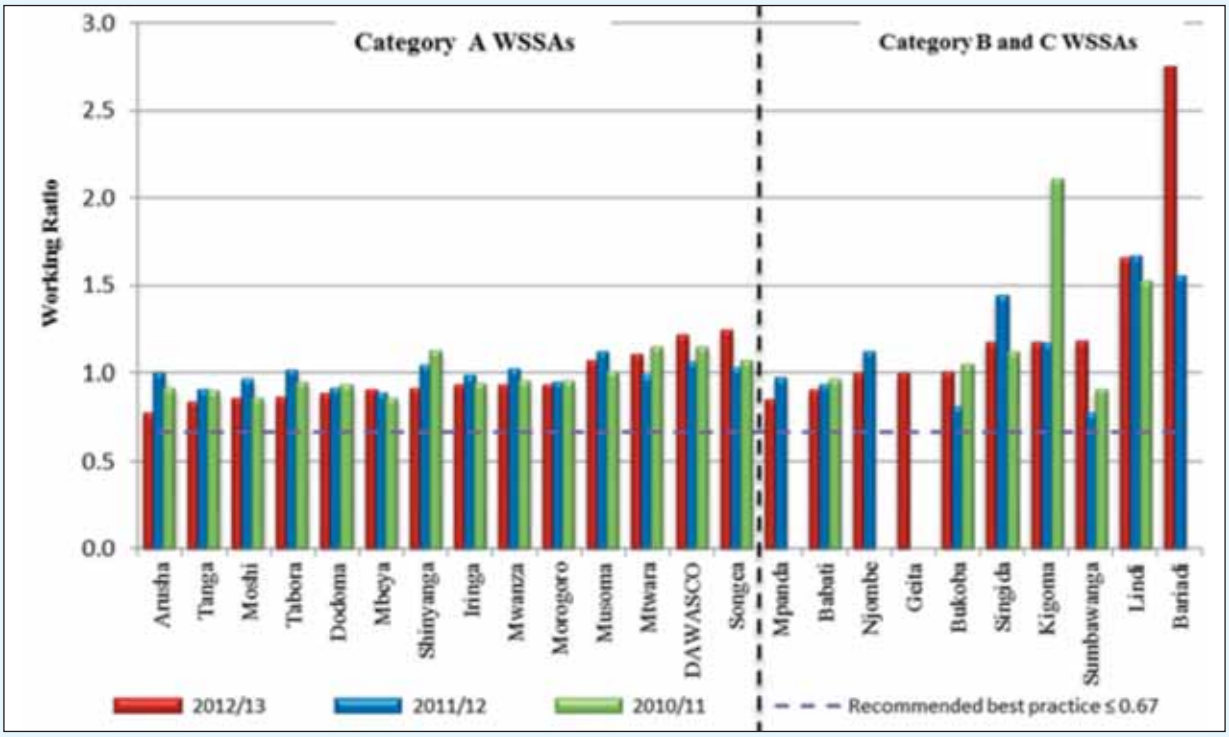


Fig. 4.12: Working Ratio

- ❖ In the year 2012/13, no utility managed to meet the recommended ratio of 0.67.
- ❖ During 2012/13, Arusha WSSA was the best performer in this indicator with a ratio of 0.77 while Bariadi WSSA was the least performer, registering the highest working ratio of 2.77
- ❖ DAWASCO's working ratio fluctuated from 1.14 reported in 2010/11 to 1.06 reported in 2011/12, and thereafter, worsened to 1.20 reported in 2012/13. This is lower than regional WSSAs' average of 1.08

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. The recommended ratio should be less than 1. In 2012/13, on average, the operating ratio increased to 1.5 from 1.2 recorded in 2011/12.

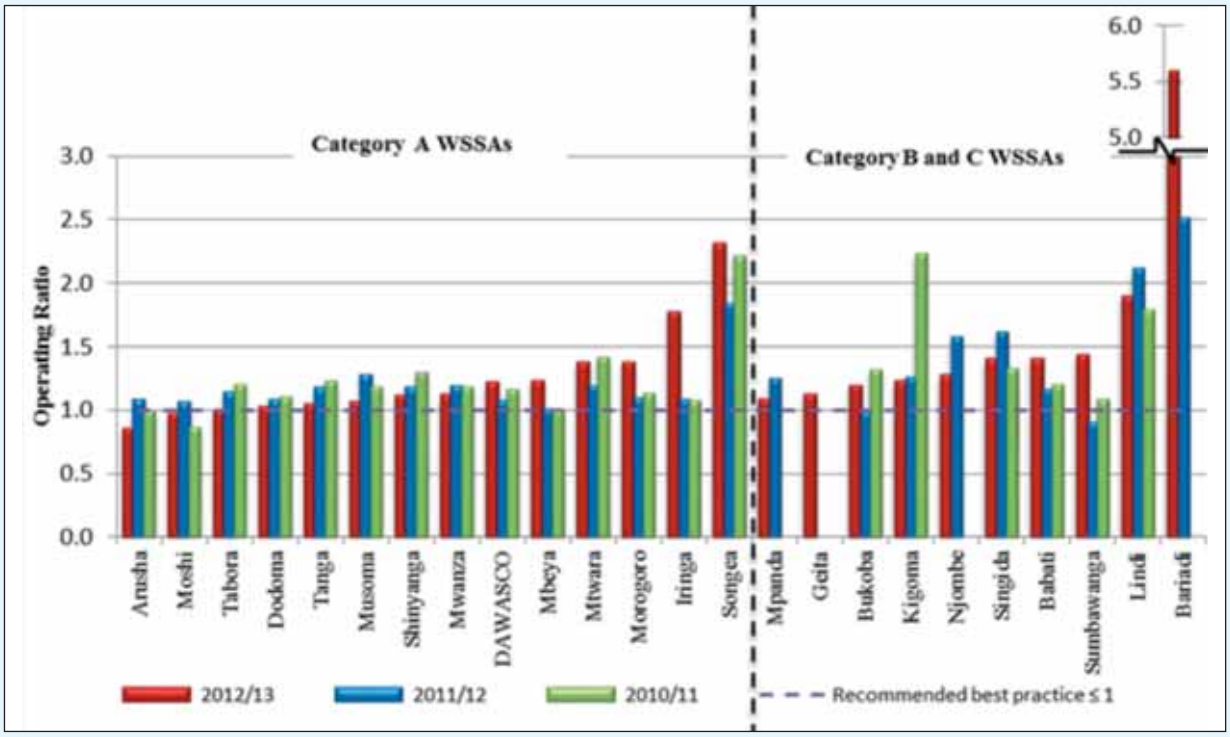


Fig. 4.13: Operating Ratio for Regional Water WSSAs

- In 2012/13, Bariadi WSSA recorded the highest Operating Ratio of 5.57 while Arusha WSSA recorded the lowest Operating Ratio of 0.85. WSSAs were the only WSSAs with the Operating Ratio of less than or equal to 1.

- In 2012/13, Lindi, Singida, Kigoma, Mwanza, Shinyanga, Musoma, Tanga, Dodoma, Tabora, Moshi, and Arusha WSSAs managed to reduce their operating ratios compared to the levels achieved during 2011/12.

DAWASCO's operating ratio increased from 1.07 reported during 2011/12 to 1.21 reported during 2012/13. This is low when compared to the average of 1.47 reported by other regional WSSAs.

4.4.2 Average Water Tariff in Use

Average Water Tariff in use is calculated as the weighted average of nominal metered tariffs of all customer categories as approved by EWURA weighted by their respective consumption levels. In the absence of the consumption levels, the domestic tariff is assumed as an estimate of the average water tariff in use. The estimation of average water tariff in use also considers the number of days in the year under review that the tariff was applicable.

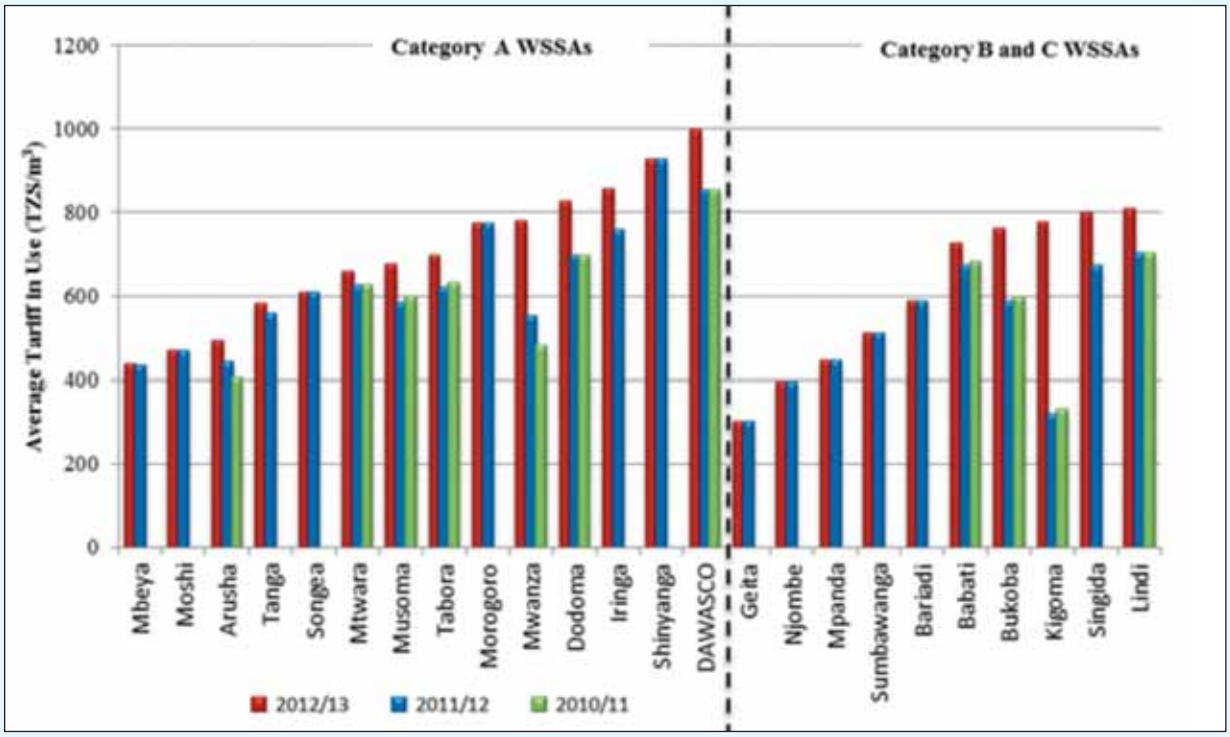


Fig. 4.14: Average Tariff in Use for Regional WSSAs

- In 2012/13 the average tariff for WSSAs increased to TZS 664.5 per m3 compared to TZS 605.9 per m^3 recorded in 2011/12.

- Mpanda WSSA (TZS 445), Njombe WSSA (TZS 395) and Geita WSSA (TZS 300) were charging relatively low water tariffs during 2012/13. It should be noted that these Utilities have not submitted a tariff application to EWURA since the regulator came into operation in 2006. The only review of tariff that was done was in 2011 when these Utilities together with other districts, small towns and national projects water utilities were given a tariff indexation by EWURA through Order No. 11-014 which became effective from 1st June, 2011.

- Shinyanga WSSA has the highest tariff among Regional WSSAs of about TZS 923 per m^3 due to the costs it incurs for purchasing bulk water from Kahama Shinyanga Water Supply Authority (KASHWASA).

- The average tariff in use for DAWASCO has remained constant at TZS 1,119.0 per m^3. This implies that DAWASCO charged a higher tariff on average during 2012/13 compared to the Regional WSSAs who charged an average of TZS 664.5 per m^3. Note that following the major tariff review in accordance with the Lease Agreement, EWURA approved a tariff of TZS 1,119.0 per m^3 during 2012/13 through Order No. 12-012. The tariff was applicable from 1st July 2012 to 30th June 2013. Note also that despite the high total customer tariff, DAWASCO's component of the tariff (that is, the Operator Tariff) was only 604 TZS/m^3.

4.4.3 Average Monthly Water Bill for Domestic Connections

As WSSAs strive to achieve cost recovery, customers are affected by increased payment obligations for water services. The average monthly bill per domestic connection is estimated as the ratio of the average domestic water billing and the number of domestic connections. The variations in the average monthly bill can be linked to the tariff structure, customer base and availability of services as well as the overall efficiency of the operations of the utility.

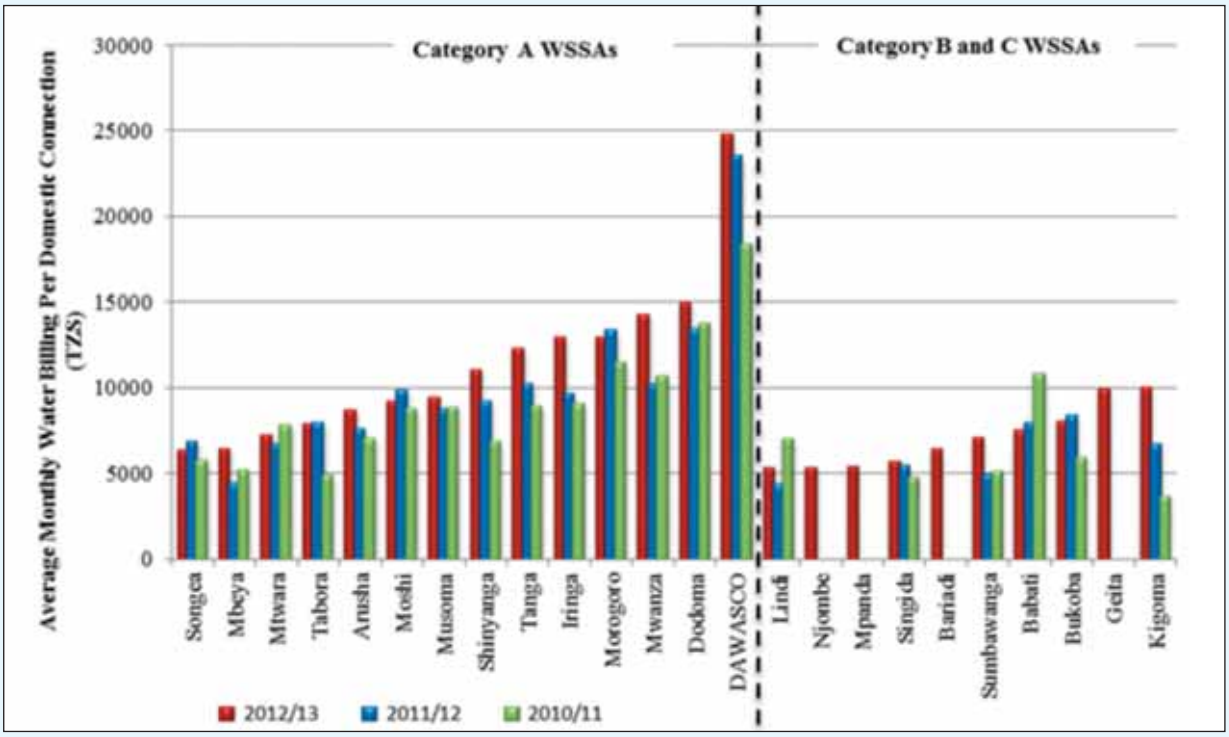


Fig. 4.15: Average Monthly Bill per Domestic Connection

- The average monthly bill per domestic connection for regional water Utilities was TZS 8,886.2 per month during 2012/13, and has increased from TZS 6,788.1 per month recorded during 2011/12.

- In 2012/13, Dodoma continued to be the most expensive area in terms of water services which is operated by a regional water authority with an average bill of TZS 14,970.1 per per domestic connection month while Lindi, the cheapest with a monthly bill of TZS 5,304.3 per month.

- During the year under review, DAWASCO's average monthly bill for domestic customers stood at TZS 24,733.2 per month which is an increase compared to the TZS 23,560.9 per month registered during 2011/12. This is also higher than the TZS 8,886.2 per month average recorded by other regional utilities.

5.0 COMPLIANCE WITH REGULATORY DIRECTIVES AND REQUIREMENTS

WSSAs have the obligation to comply with regulatory directives and requirements. Among the major regulatory obligations with which WSSAs need to comply include Tariff Conditions, Reporting requirements and the Performance Targets as stipulated in the Memorandum of Understanding between the WSSAs and the Ministry of Water. Additionally, DAWASCO is obliged to comply with the agreed performance targets indicated in its Lease Agreement with DAWASA.

5.1 Tariff Reviews and Compliance with Tariff Conditions

During the period under review, EWURA approved eight tariff review applications from the water utilities as shown in Table 5.1 below. Except for Mtwara WSSA, whose tariff review application was for automatic adjustment, the rest water utilities' tariff review applications were for multiyear tariff adjustments based on their business plans. There has been an increasing trend of submission of multiyear tariff review applications compared to previous year where only 2 water utilities submitted multiyear tariff applications. Water utilities have been encouraged to propose tariffs that are consistent with their Business Plans.

Table 5.1: Tariff Review Determinations

Applicant WSSA	Date of Receipt of Tariff Application	Previous Average Tariff (TZS/m3)	Approved Tariff (TZS/m3)			Effective Date
			2012/ 13	2013/14	2014/ 15	
Mtwara	05-04-12	622.31	711.5			01-09-12
Arusha	23-01-12	503.27	667.8	734.8	806.7	01-01-13
Mbeya	29-05-12	420.34	594.7	700.3	778.0	01-01-13
Tanga	04-09-12	574.60	823.3	796.5		01-01-13
Musoma	02-01-13	674.67		980.1	1,013.1	01-08-13
Babati	18-02-13	717.69		866.6	977.0	01-08-13
Moshi	09-03-13	471.10		561.5	561.5	01-08-13

Tariff approvals are usually accompanied by conditions that need to be fulfilled by the applicant WSSA. Normally, the conditions have to be fulfilled within or before a specified duration. EWURA evaluates implementation of the tariff conditions by assigning weights to the implementation of each condition. The criteria for evaluation is detailed under Appendix 3: Table A3.3.

During the year under review, Regional WSSAs and DAWASA/DAWASCO had to comply with a total of 60 conditions. Some of the conditions are those which were issued in the previous years but had to be fulfilled in the year 2012/13. On average, the overall compliance with the tariff conditions was 59.4%. Previously, in 2011/12, Regional WSSAs were to fulfil 67 conditions and they achieved 71% compliance. Therefore, the performance during the reporting period has unsatisfactorily declined. Figure 5.1 below gives a graphical presentation on the overall tariff conditions compliance for each Regional WSSA during the reporting period. Details of the tariff conditions for each Regional WSSA and DAWASA/DAWASCO including their compliance evaluation criteria are presented in Appendix 3: Table A3.2. It should be noted that all the new Regional WSSAs are still operating under the Automatic Tariff issued to DSNP WSSAs with only one condition, which was the submission of the reports to EWURA. However, they were not included in this year's performance evaluation.

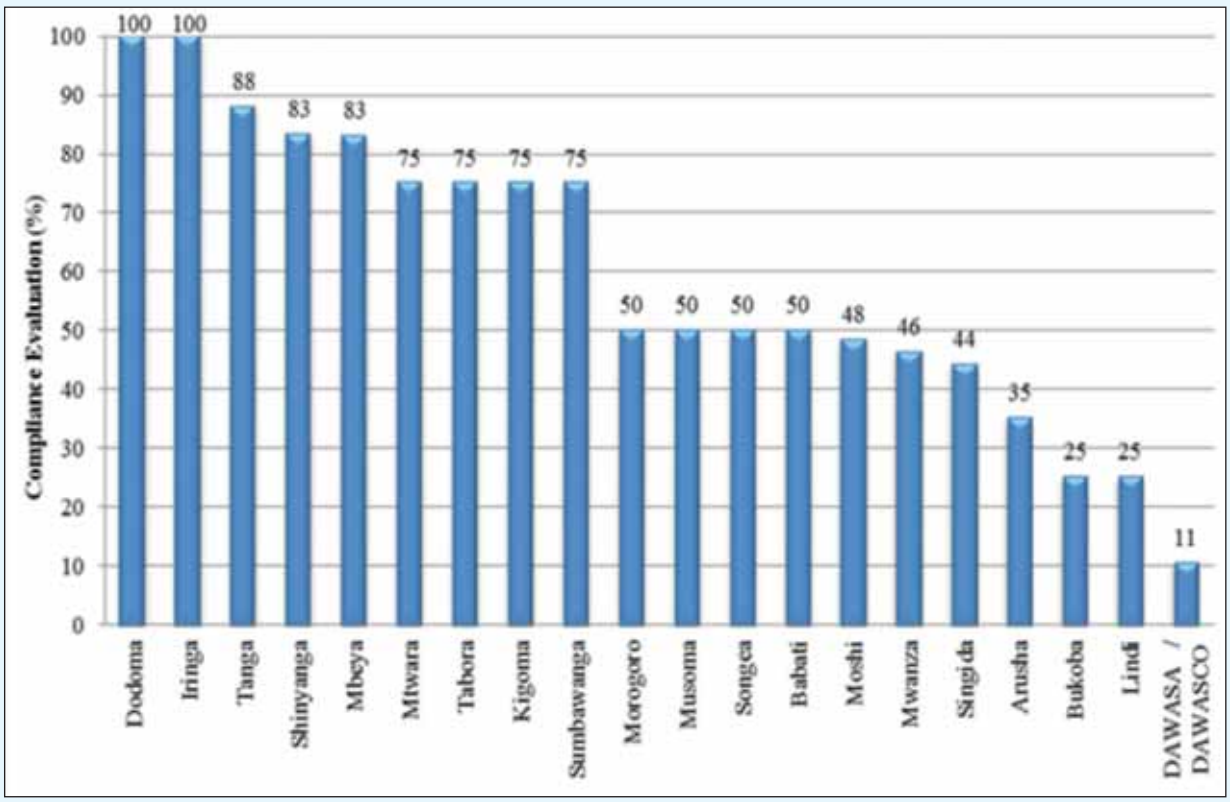


Figure 5.1: Evaluation of compliance with tariff conditions

- Most of the Regional WSSAs and DAWASA/DAWASCO failed to timely submit the reports to EWURA, which is one of the common condition in all the tariff orders.

- It should be noted that Dodoma and Iringa WSSA complied fully with the only condition they had, which is to timely submit the reports to EWURA. Seven other WSSAs had also only this one condition, but they failed to fully comply with.

- Previously, in 2011/12, the best performer in complying with the tariff conditions was Tabora WSSA which attained 98% points; the least was Singida WSSA with 30% points.

5.2 Reporting Obligations

Regional WSSAs report to EWURA in two (2) ways. Firstly, utilities submit monthly performance data through the Water Utilities Information System alternatively known as MajIs. This is a web-based software in which WSSAs enters their monthly and annual data. The data and reports in MajIs can be viewed by EWURA, MoW and the utility itself. Secondly, Regional WSSAs are obliged to submit their Annual Performance Reports including Financial Statements. Timely submission of reports by WSSAs is of utmost importance for regulatory purposes. Therefore, the criterion used for evaluation of the compliance with the reporting obligations is timely submission of the reports as required by the MoU between WSSAs and MoW.

5.2.1 MajIs Reports

WSSAs are required to submit their monthly MajIs reports on or before 15th day of the following month and the annual MajIs report by 31st December each year. In previous years, MajIs was a stand-alone software which necessitated for installation in the utilities' computers and the data was to be submitted to EWURA as an email attachment. During the reporting year, a new web-based version of Majis was released, giving the WSSAs more flexibility on the usage and submission of their data. However, due to the system bugs that were observed on the use of the web-based MajIs, very few utilities managed to submit their monthly reports on time, and those whose reports were timely submitted, their data was of low quality. Therefore, in evaluating the utilities' performance on submission of monthly MajIs reports, EWURA considered all the reports submitted by 30th September, 2013 to be timely submitted.

Except for DAWASCO, Songea WSSA, Lindi WSSA and the new Regional WSSAs, all other WSSAs submitted their monthly MajIs reports on time. Songea WSSA submitted only 6 of the 12 monthly reports. DAWASCO submitted only 7 of the monthly reports. Lindi WSSAs and the new Regional WSSAs of Bariadi, Njombe, Mpanda and Geita did not submit their MajIs monthly reports during the reporting period.

5.2.2 Draft Annual Technical and Financial Reports

Before the end of 30th September of every year, WSSAs are required to have submitted their draft Annual Technical Report and draft Financial Statements. By 31st December, every year, WSSAs are required to submit their final Annual Technical Reports together with the audited Financial Statements. During the reporting period, 6 water utilities submitted both the draft annual technical report and draft financial statement on time; these were Arusha, Dodoma, Iringa, Shinyanga, Tanga and Babati WSSAs. On the other hand, 6 water utilities submitted their draft financial statements on time, however, their draft technical annual reports were submitted late. These include Mtwara, Mwanza, Songea, Tabora, Sumbawanga and Lindi WSSA. The rest of the water utilities submitted both of the reports late. The details on the reports submission is presented in Appendix 3: Table A3.1.

5.2.3 Compliance with MoU Performance Targets

Ministry of Water signs a Memorandum of Understanding with the WSSAs which among other things contains agreed performance targets on several key performance indicators. During the year under review, the current MoU was in its second year of implementation. In order to determine utility's performance, EWURA selected eight key performance indicators out of several indicators agreed in the MoU. It is anticipated that WSSA's performance on the selected key indicators has significant impact on the overall performance of the utility. The new regional WSSAs of Bariadi, Mpanda, Njombe and Geita were not included in this year's evaluation since they have not yet signed the MoU with the Ministry of Water, and hence their performance targets are yet to be established. Six of the selected key performance indicators indicate utility's performance on rendering water supply services. These are;

a) proportion of population living within the area with water network (%);

b) water quality compliance (%) (E-coli and Turbidity) ;

c) metering ratio (%);

d) non-revenue water (%);

e) working ratio; and

f) personnel/1000 (W&S) connections.

The remaining two indicators indicate utility's performance on rendering sewerage services. These are;

a) proportion of the population connected with sewerage network (%); and

b) waste water quality compliance (%) (BOD5 and COD).

In order to evaluate and compare Regional WSSAs' performance on the above selected indicators, EWURA assigns scores on each indicator based on utility's achievement towards attaining the set target. The maximum score that is attained by a good performing utility on each indicator is 75 points. Attainment of performance equal to the overall average (median) for each indicator is 50 points, while the least attainment on each indicator is 0 points. Intermediate performance scores are allocated pro rata values by linear interpolation between the minimum, average and maximum scores. In addition, a utility is awarded 25 points bonus for attaining or surpassing the set targets on the MoU on each indicator.

Evaluation on the Regional WSSAs' performances on water quality considered the average compliance with E-coli and Turbidity standards on drinking water reported by the utility and the EWURA's test results on the two parameters. The average of the two results is then used for evaluation. Likewise, the evaluation on performance on wastewater effluent quality standards considered the average of the two test results; EWURA results and the average reported by the utilities.

Based on the evaluation criteria described above, the overall average performance of the Regional WSSAs during the reporting period was 61% declining from the 65.2% attained in 2011/12. Figure 5.2 below presents average points attained for each utility based on evaluation of all the six water supply indicators. The detailed computation for each indicator for every WSSAs is presented in Appendix 4.

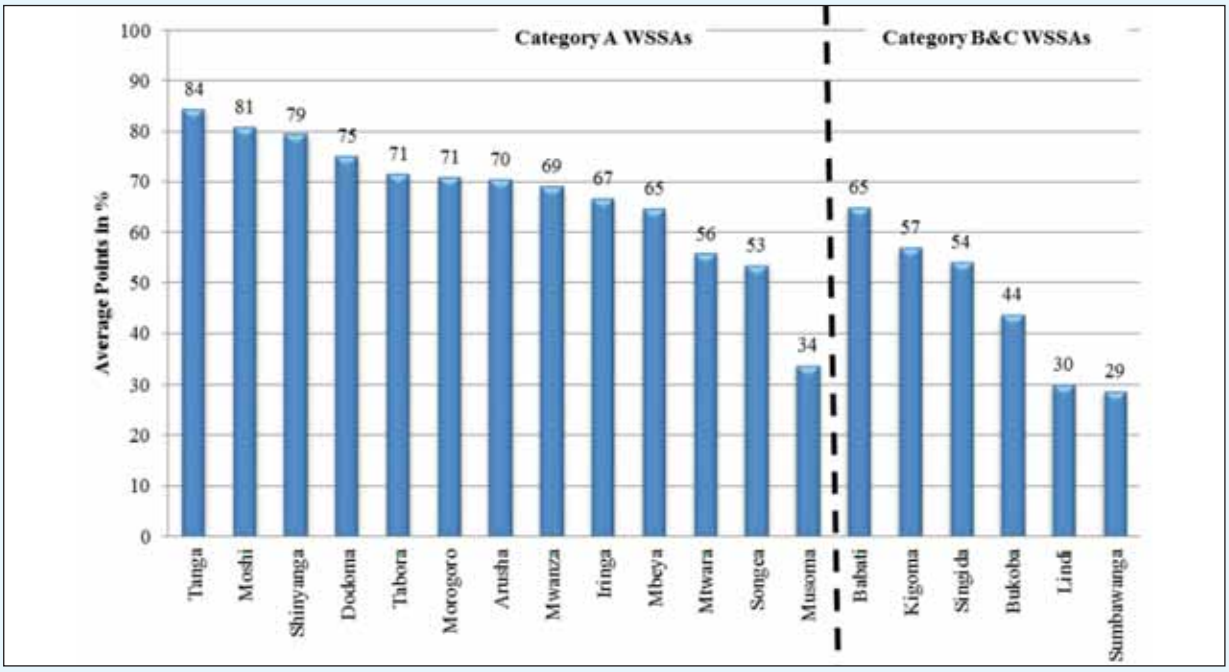


Figure 5.2: Regional WSSAs' evaluation on attainment of water supply performance targets

- ❖ Tanga WSSA has emerged the overall best performer in the selected water supply performance indicators. In 2011/12, Mbeya WSSA led the performance in this group.

- ❖ Sumbawanga WSSA has become the last in this group during the reporting period taking the position of Lindi WSSA in the previous year.

On the two selected sewerage performance indicators, the ten Regional WSSAs rendering sewerage services attained an overall average of 58% during the reporting period. Previously, in 2011/12, the average achievement of these utilities was 54%. Therefore performance in this year has slightly improved. Figure 5.3 below presents average scores for attainment of targets on sewerage performance indicators and the detailed computation are presented in Appendix 4.

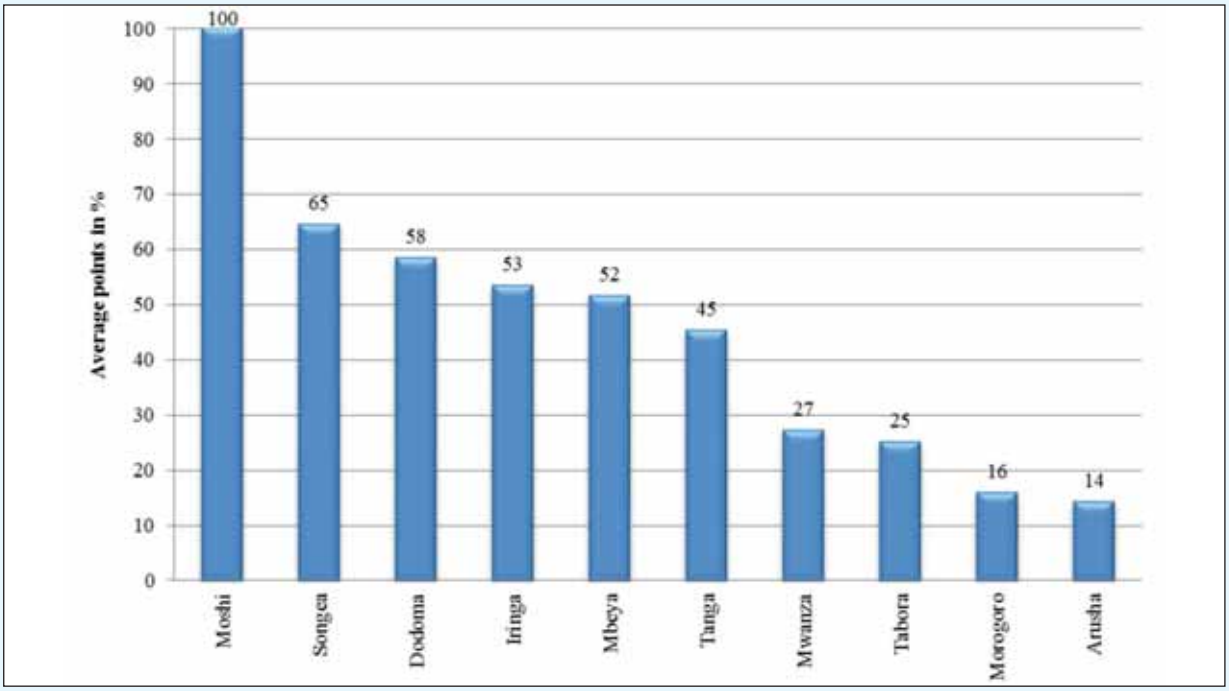


Figure 5.3: Regional WSSAs' evaluation on attainment of sewerage performance targets

- ❖ As it was in the previous year, Moshi WSSAs continued to lead performance in this group during the reporting period, with further improvement on the average points from 70% achieved in 2011/12 to 100% during the reporting period.

- ❖ Arusha has dropped to the last position in this group taking the position of Morogoro WSSA in the previous year.

5.2.4 Compliance with the Lease Agreement between DAWASA and DAWASCO

According to the Lease Contract signed between DAWASA and DAWASCO, the latter is required to meet and fulfill the Performance Targets as set in the Lease Contract. The targets in the Lease are divided into two categories i.e. the targets that are subjected to financial penalty to the Operator upon their non-compliance and those targets that are not subjected to financial penalty upon their non-compliance but are meant to measure the improvement of service delivery by the Operator. Overall evaluation of DAWASCO in terms of compliance with performance targets in the Lease Agreement with DAWASA shows that DAWASCO failed to comply with 41% of the targets subjected to financial penalties for noncompliance. DAWASCO failed to comply with performance targets on effluent quality, customer metering and reduction of water losses Appendix 3 Table A3.4 shows the compliance of DAWASCO with the performance targets subjected to financial penalty as stipulated in the Lease contract in detail.

6.0 PERFORMANCE RANKING

Regional WSSAs are ranked according to their performance on rendering water supply and sewerage services. The major criterion used for performance ranking of the utilities is their performance in meeting the MoU targets on the selected key performance indicators, reports submission and compliance with the tariff conditions as evaluated in Chapter 5 of this report. Additionally, the Regional WSSAs get extra points when they qualify for the permanent licence from EWURA. The performance ranks are determined in two-fold; firstly the rank based on total points obtained in performance of water supply services and secondly rank based on total points obtained in performance of sewerage services. The new Regional WSSAs of Bariadi, Njombe, Geita and Mpanda are not involved in the ranking since they have not been evaluated as they have not yet signed the MoU with the Ministry of Water.

6.1 Water Supply Performance Ranking

In order to rank the Regional WSSAs' performance on water supply services, a maximum of 100 points is assigned to the utility based on its performance as follows;

- ❖ The utility's average performance on the achievement of the MoU targets on the selected performance indicators contributes 70 points;

- ❖ The remaining 30 points are awarded to the Regional WSSAs based on their compliance with various regulatory directives as discussed in Sections 5.1 and 5.2 of this report. The points are distributed as follows;
  - Compliance with tariff conditions - 5 points
  - Qualified for permanent license - 5 points
  - Timely submission of each monthly MajIs reports - 10 points
  - Timely submission of draft technical annual report - 5 points
  - Timely submission of draft financial report - 5 points

Based on the above ranking criteria, **Tanga WSSA** emerged the best utility in all the Regional WSSAs on water supply services, taking the position of Mbeya WSSA which dropped to the 11th position. On the other hand, Lindi WSSA dropped to the last position, which was occupied by Kigoma WSSA in the previous year. Table 6.1 below presents the results on the performance ranking evaluation on water supply.

Table 6.1: WSSAs Ranking Scores on Water Supply Performance Indicators

Points scored by Regional WSSAs on Various Water Supply Performance Indicators	CATEGORY A WSSAs													CATEGORY B&C WSSAs					
	Tanga	Shinyanga	Dodoma	Iringa	Arusha	Mwanza	Moshi	Tabora	Morogoro	Mbeya	Mtwara	Songea	Musoma	Babati	Kigoma	Singida	Bukoba	Sumbawanga	Lindi
Proportion of population living within the area with water network	99	25	51	70	47	67	100	46	62	71	59	31	77	55	39	85	45	0	63
Water Quality Compliance - (E-coli and Turbidity)	69	66	100	59	62	99	68	56	46	44	41	100	0	67	37	69	45	34	99
Metering Ratio	100	100	100	100	100	100	100	100	96	69	100	44	5	100	96	38	45	12	0
Non-Revenue Water	68	100	53	20	37	36	64	56	98	51	34	66	23	47	54	61	0	39	17
Working Ratio	69	86	88	59	100	58	66	91	58	61	43	33	46	87	38	38	51	37	0
Personnel/1000 (W&S) connections	99	99	57	91	74	90	86	79	63	90	55	100	51	33	77	33	75	48	0
Total Points on water services converted to 70pts	**58.9**	**55.4**	**52.5**	**46.5**	**49.1**	**52.6**	**56.4**	**49.9**	**49.4**	**45.1**	**38.8**	**43.6**	**23.6**	**45.3**	**39.7**	**37.7**	**30.4**	**19.9**	**21.0**
Tariff Conditions Compliance Converted to 5pts	*4.4*	*4.2*	*5.0*	*5.0*	*1.8*	*2.3*	*2.4*	*3.8*	*2.5*	*4.2*	*3.8*	*2.5*	*2.5*	*2.5*	*3.8*	*2.2*	*1.3*	*3.8*	*1.3*
Qualified for EWURA Permanent License - 5pts	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*
Submission of MajIs monthly reports - 10pts	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*5*	*10*	*10*	*10*	*10*	*10*	*10*	*0*
Submission of draft technical annual report- 5pts	*5*	*5*	*5*	*5*	*5*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*0*	*0*	*0*	*0*	*0*
Submission of draft financial statement - 5pts	*5*	*5*	*5*	*5*	*5*	*5*	*0*	*5*	*0*	*0*	*5*	*5*	*0*	*5*	*0*	*0*	*0*	*5*	*5*
Total Points on Water Services - 100pts	**88.3**	**84.6**	**82.5**	**76.5**	**75.8**	**75.0**	**73.8**	**73.6**	**66.9**	**64.3**	**62.6**	**61.1**	**41.1**	**72.8**	**58.5**	**54.9**	**46.7**	**43.7**	**32.2**
RANK WITHIN ALL REGIONAL WSSAs	⇧1	⇧2	⇧3	⇧4	⇧5	⇧6	⇩7	⇧8	⇩10	⇩11	⇩12	⇩13	⇩18	⇧9	⇧14	⇧15	⇩16	⇩17	⇩19
RANK WITHIN CATEGORY	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**1**	**2**	**3**	**4**	**5**	**6**
Previous Year's Rank Within All Regional WSSAs	**2**	**10**	**5**	**12**	**8**	**7**	**3**	**11**	**9**	**1**	**6**	**4**	**17**	**13**	**19**	**16**	**15**	**14**	**18**

- ❖ Shinyanga WSSA made great improvement in performance of water supply services during the reporting period such that it moved up from 10th to 2nd position. Other utilities which made significant improvements are Iringa WSSA which moved up from 12th to 4th position and Kigoma WSSA which moved from the last position to 13th during the reporting year.

- ❖ Significant drop in performance ranking during the reporting period was that of Songea WSSA which dropped from the 4th position in 2011/12 to the 15th position during the reporting period and Mbeya WSSA which moved from the top position to 11th position over the same period.

6.2 Sewerage Services Performance Ranking

Ranking of the Regional WSSAs' performances on sewerage services was based solely on their achievements of the MoU targets for the two key performance indicators on sewerage services as evaluated in Section 5.2.3 above. **Moshi WSSA** retained its 1st position for another year. Meanwhile, Arusha WSSA dropped to the last position which was occupied by Morogoro WSSA during the previous year. Table 6.2 presents the results on sewerage performance ranking evaluation for the regional WSSAs.

Table 6.2: WSSAs Ranking Scores on Sewerage Perfomance Indicators

Points scored by WSSAs on Sewerage Performance Indicators	Moshi	Songea	Dodoma	Iringa	Mbeya	Tanga	Mwanza	Tabora	Morogoro	Arusha
Proportion of population connected with sewerage network (%)	100	29	54	83	41	65	5	50	0	28
Wastewater quality compliance (%) (BOD and COD)	100	100	64	26	64	0	52	0	35	0
Total Points on Sewerage Indicators - 100pts	**100**	**65**	**59**	**55**	**52**	**33**	**28**	**25**	**18**	**14**
RANK WITHIN WSSAs WITH SEWERAGE SERVICES	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Previous Year's Rank	**1**	**3**	**4**	**8**	**2**	**9**	**6**	**5**	**10**	**7**

7.0 KEY OBSERVATIONS AND RECOMMENDATIONS

In the course of reviewing the performance of water utilities as presented in this report, a number of issues pertinent to sustainability of services provided by Regional WSSAs and DAWASCO have been disclosed. This section highlights the key issues observed and their corresponding recommendations and responsible institutions. The key issues observed are insufficient water production, high Non-Revenue Water, low water service coverage and high personnel costs as presented in Table 7.1 below.

Table 7.1: Key Observations and Recommendations

Key Issues	Observations	Recommendations	Responsible
7.1 Diminishing Water Sources	It has been observed that water demand in most of the Regional WSSAs and DAWASCO surpass both their installed capacities and actual water production. It has been further noted that the available water production capacities are underutilized. Among others, insufficient water distribution network coverage has been a salient feature of most utilities that are underutilizing their present water production capacities.	Regional WSSAs and DAWASA should design and implement short term and medium term measures to increase water production in their service areas. The implementation plans should be part of their Three Years Business Plans. Utilities should also explore opportunities available for financing their plans under Public Private Partnership (PPP) arrangements. In addition, utilities should implement strategies for optimally utilizing their present installed water production capacities. This includes extension of water supply networks to un-served areas.	Regional WSSAs and DAWASA.
7.2 High Non Revenue Water	Non-Revenue Water (NRW) has continued to be a challenge facing all Regional WSSAs and DAWASCO. None of the utilities has managed to achieve the recommended best practice of 20% or less. While strategies for reduction of NRW are fairly presented in their business plans, there is either a general lack of commitment to implement them or the strategies are more generic than being based on thorough analysis of causes of NRW in a particular utility.	Water utilities should review NRW reduction strategies indicated in their business plans. Regional WSSAs and DAWASCO should implement NRW reduction strategies that will address particular NRW causes in their utilities. Additionally, WSSAs and DAWASCO should design and implement their own tailor-made short-term and long-term strategies to curb NRW using their internal capabilities.	Regional WSSAs, DAWASA and DAWASCO.

Key Issues	Observations	Recommendations	Responsible
7.3 Low water service coverage	It has been observed that the proportion of population directly served with water is low for both Regional WSSAs and DAWASCO. It has also been observed in all the utilities, the population living in area with water network is higher than the population directly served. This implies that there is a potential for increasing coverage if the existing infrastructures are effectively utilized. Low water service coverage in the utilities is mainly contributed by insufficient water production, low network coverage and low customer base.	Utilities should implement measures to increase service coverage in their service areas. Measures to be implemented include extension of distribution network as well design programs to promote customer connections.	Regional WSSAs, DAWASA and DAWASCO.
7.4 High personnel costs	It has been observed that personnel costs as percentage of revenue collection for most Regional WSSAs has been increasing over the past three years and is in most cases above the 30% limit stipulated in the MoU between WSSAs and the Ministry of Water. Lindi and Moshi WSSAs have especially reported the highest ratios of the personnel costs.	Regional WSSAs should take appropriate steps to ensure compliance with the requirements of the MoU regarding personnel costs. The report on implementation of the aforementioned steps should be submitted with their regular performance reports.	Regional WSSAs, DAWASA and DAWASCO.

EWURA's Role:

(i) To provide guidance to authorities on planned strategies for increasing water production, reduction of NRW and extension of water distribution systems while reviewing their Business Plans;

(ii) To facilitate PPP arrangements by providing templates for PPP contracts; and

(iii) To monitor the implementation of Business Plans by Authorities.

APPENDICES

APPENDIX 1: UTILITY PROFILES

ARUSHA WATER SUPPLY AND SANITATION AUTHORITY (ARUSHA WSSA) **Profile**

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 416,442 persons as per 2012 census report. The present service area of the utility has a population density of 2002 persons/km^2.The utility draws water from one surface source (River Nduruma – 17.96%) and groundwater sources (springs-45% and boreholes-37.04%). The Utility has a sewerage system with a sewer line of 45.45 km and sewage treatment comprising of five ponds. The average daily flow into the ponds is 5,184m ^{3}/day.

General Data About Water Utility

Total Water Connections	34,561
Total Waste Water Connections	4260
Total Staff	197
Annual O&M Costs	TZS 4,809,316,952
Annual Water and Sewerage Collections	TZS 5,430,401,005
Annual Water and Sewerage Billings	TZS 5,742,004,000

Tariff Structure

Category	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption Block	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**
0-5 m^3	530	530	620	880
5-15 m^3	620	580	750	950
>15m^3	720	620	880	1,040

Notes: The Charges at water Kiosk are TZS 10 /20LTS while at the Water Bottling plant TZS 6,110/m^3

SEWERAGE TARIFF					
Category	Domestic	Institution	Commercial	Industrial	Bottling Industry
TZS per m^3 of drinking water	150	230	300	340	340

Priority of Needs

1. Addition of new water sources; 2. Fund for Capital Projects and extension of water and sanitation services 3. Replacement and Improvement of the existing sewerage network and wastewater treatment plant respectively; 4. Reduction of Non Revenue Water to the acceptable level; 5. Pressure zoning of the distribution network; 6. Environmental protection of spring and river sources catchment areas.

Consumer Service

Average monthly water consumption is about 16m^3 per domestic connection with per capita consumption of 70lts/day. Water is available at an average of 12 hours a day .Water quality meets the required standard with overall average compliance of 98.73%. During the year under review, there were 3440 consumer complaints reported and all were resolved.

Performance Highlights

Arusha WSSA provides water supply direct to 70.4% of the population in its service area. The NRW has been increasing over the past three years to 40.6%. Bulk meters are installed at production points and all service connections are metered. Operating and working ratios are good at 0.84 and 0.77 respectively. Accounts receivable equivalent is 3.6 months. Average tariff at TZS 577 per m^3 is reasonable and sufficient to cover operating expenses and part of investment. Staff/1000 total connections ratio is satisfactory at 5.2. The number of new water connections made was 1455 while sewerage connections were 69.

ARUSHA WATER SUPPLY AND SANITATION AUTHORITY (ARUSHA WSSA)

Population 386,747

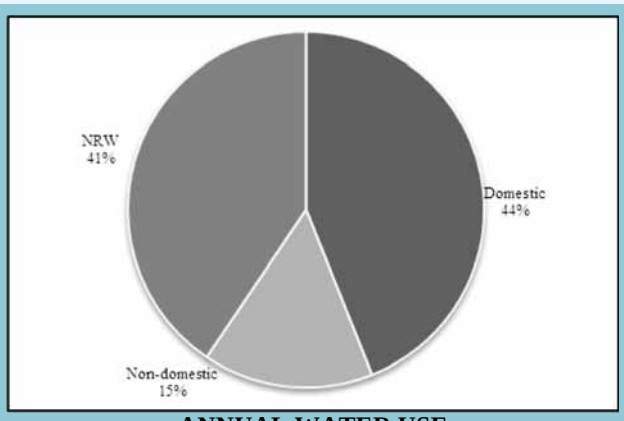
Production/Distribution	
Average daily production	38,702.96m^3
Production capacity/day	4,847 m^3
Treatment type	Chlorine Dosing
Storage capacity	12,697m^3
Service area	208km^2
Distribution pipe network	260.95km

Service Connections	
Total water connections	34,561
Domestic water connections	32,049
Total sewer connections	4,260
Domestic sewer connections	3,349
Metered water connection	100%

Service Indicators	
Water Service Coverage	70.4%
Service hours	12
Per capita consumption	70l/c/d
Average Tariff	577TZS/m^3
Complaints/1000 connection	88.61

Efficiency Indicators	
Non-Revenue Water	40.6%
Revenue collection efficiency	87.3%
Unit production cost	374 TZS/m^3
Operating ratio	0.85
Working ratio	0.77
Account receivable	3.6
Staff/1000 total connections	5.2
Number of Sewer Blockage	41.41nr/km/year

Income and Expenditure	
Annual operating income from water and sewerage services	TZS 5,742,004,000
Government /Donor Grants	TZS -
Armotised Grants	TZS 66,721,000
Other income	TZS 502,959,000
TOTAL INCOME	**TZS 6,311,684,000**
Water Production Expenses	TZS 692,270,966
Water distribution expenses	TZS 266,301,931
Maintenance and Repair	TZS 541,848,762
Personnel Expenses	TZS 1,715,469,000
Administration Expenses	TZS 1,187,062,000
Other O&M Expenses	TZS 406,364,294
Total O&M	**TZS 4,809,316,952**
Depreciation & Amortization	TZS 470,943,000
ANNUAL EXPENDITURE	**TZS 5,280,259,952**



ANNUAL WATER USE
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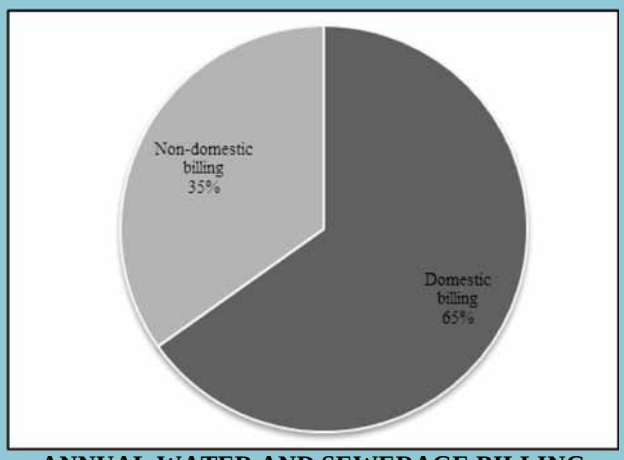
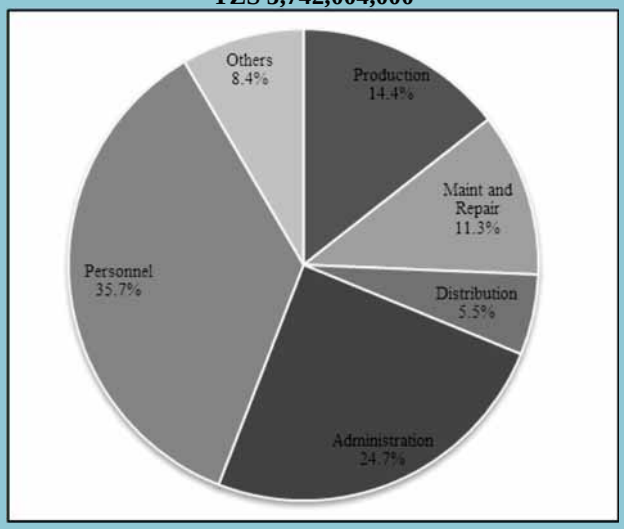


ANNUAL WATER AND SEWERAGE BILLING
TZS 5,742,004,000



ANNUAL O&M COSTS
TZS 4,816,266,952

DODOMA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (DODOMA WSSA) **Profile**

Water Utility

Dodoma WSSA is a fully autonomous public entity responsible for the overall operation and management of water supply and sanitation services in the Dodoma Municipality. Its area of operation has a total population of 410,956 people while the served population is 288,553 people. Population living in area with network is 334,382. The utility draws water from groundwater sources (borehole - 100%) having 22 boreholes in total located at the Mzakwe well field. Currently, 10 boreholes are functioning while the remaining 12 are not in operation due to various reasons. The Utility has a sewerage system with sewer line length of 76.2km, and sewage treatment is by waste stabilization ponds. The average daily flow into ponds is 4,690m^3/day (1,711,850m3/year).

General Data About Water Utility

Total water connections	27,134
Total waste water connections	4,560
Total staff	230
Annual O&M costs	TZS 6,748,135,000
Annual water and sewerage collections	TZS 6,983,160,513
Annual water and sewerage billing	TZS 7,116,518,000

Tariff Structure

WATER TARIFF

Category	Domestic	Institutional	Commercial	Worship Houses	Kiosks	Bowser
TZS./m^3	710 – 830	925 - 995	925 - 995	710 - 830	595	2,375

SEWERAGE TARIFF

For all customer categories:	Domestic	Institutional	Commercial	Industrial
Percentage of the water bill (%)	40	40	40	40

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	Meter Rent
TZS.	TZS.	TZS.	TZS.	TZS.
21,000 – 41,000	10,000 – 25,000	1,400	3,000	1,000 – 1,500

Priority of Needs

1. Rehabilitation of existing boreholes and development of new boreholes so as to increase water production and distribution. 2. Extension of lateral sewers and trunk sewer; Acquiring 6Hacters of land and construct new waste stabilization ponds 3. Reduce high levels of NRW by rehabilitation of dilapidated transmission and distribution network line.

Consumer Service

Average monthly consumption is about 16m^3 per connection, with per capita consumption of 74lts/c/day. Water is available at an average 19 hours per day. Water quality compliance with WHO set standards is good with E-coli and turbidity having 100% compliance.

Performance Highlights

Dodoma WSSA provides water supply direct to 70.2% of the population in its service area. The NRW is still high at 34.1%. All customers are metered thus having a metering ratio of 100%. Operating ratio stands at 1.02 and accounts receivable equivalent is 2.6 months. Average tariff stands at TZS. 822 per m^3 which covers operating expenses. The ratio of staff per 1000 total connections ratio is 7.4

DODOMA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (DODOMA WSSA)

Total Population in the Service Area: 410,956

Production/Distribution

Average daily production	29,600m^3
Production capacity/day	45,000m^3
Treatment type	Chlorination
Storage capacity	78,700m^3
Length of distribution network	301km

Service Connections

Total water connections	27,134
Domestic water connections	25,397
Total sewer connections	4,560
Domestic sewer connections	4,133
Metering ratio	100%

Service Indicators

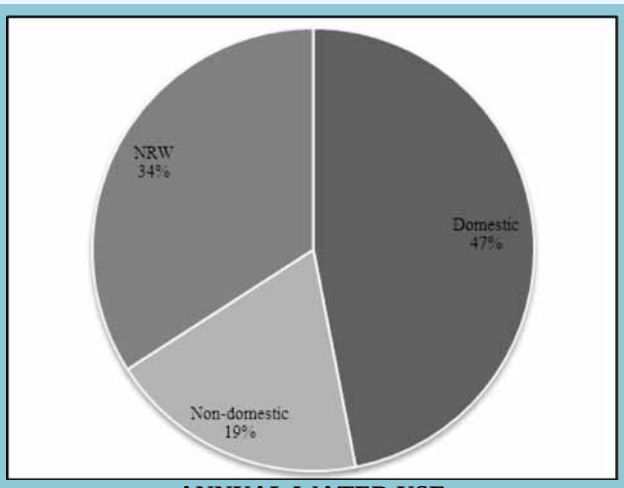
Water service coverage	70.2%
Average service hours	19
Per capita consumption	74lts/c/d
Average tariff	TZS 822/m^3

Efficiency Indicators

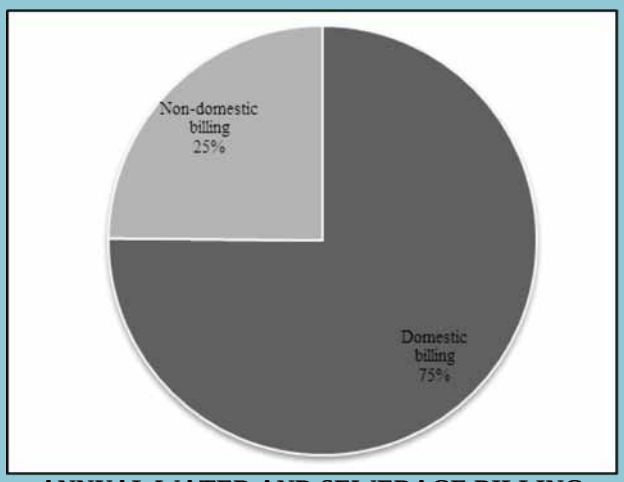
Non-revenue water	34.11%
Unit production costs	TZS 723.7/m^3
Operating ratio	1.02
Working ratio	0.88
Account receivable	2.6 months
Staff/1000 connections	7.4

Income and Expenditure

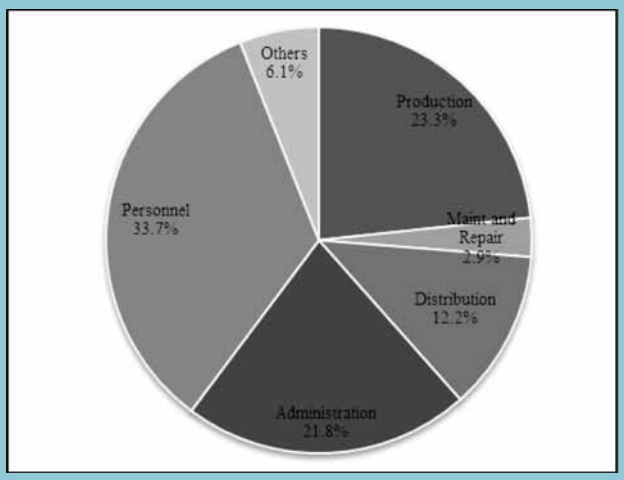
Annual operating income from water and sewerage services	TZS 7,116,518,000
Government /Donor Grants	TZS -
Amortized Grants	TZS 485,297,000
Other income	TZS 530,265,000
TOTAL INCOME	**TZS 8,132,080,000**
Water Production Expenses	TZS 1,573,319,000
Water distribution expenses	TZS 820,417,000
Maintenance and Repair	TZS 198,694,000
Personnel Expenses	TZS 2,273,835,000
Administration Expenses	TZS 1,473,520,000
Other O&M Expenses	TZS 408,350,000
Total O&M expenses	**TZS 6,748,135,000**
Depreciation & Amortization	TZS 1,076,503,000
ANNUAL EXPENDITURE	**TZS 7,824,638,000**



ANNUAL WATER USE
10,812,272 m^3



ANNUAL WATER AND SEWERAGE BILLING
TZS 7,116,518,000



ANNUAL O&M COSTS
TZS 6,748,135,000

IRINGA WATER SUPPLY AND SANITATION AUTHORITY (IRINGA WSSA) **Profile**

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 the Iringa Municipality. Iringa WSSA is classified as a Class A water utility and its area of operation has a total population of 151,345 people while the current served area of the utility has a population of 145,000. Proportion of Population Living in the area with water network is 95.8%. The utility draws water from surface (River - 87%) and groundwater sources (spring - 13%) and has a conventional treatment plant. The utility has a sewerage system with a sewer line length of 40.7 km, and sewerage treatment is by waste stabilization ponds. The average daily flow into the ponds is 1,125m^3/day.

General Data About Water Utility

Total water connections	14,628
Total waste water connections	1,435
Total staff	97
Annual O&M costs	TZS 3,436,153,541
Annual water and sewerage collections	TZS 3,156,939,153
Annual water and sewerage billing	TZS 3,480,813,492

Tariff Structure

WATER TARIFF

Category	Domestic	Institutional	Commercial	Industrial	Kiosks
TZS./m^3	755-915	740-915	795-915	795-915	500
Flat rate (TZS/month)	6,275	13,180	9,400	13,180	6,275

SEWERAGE TARIFF

Category	Domestic	Institutional	Commercial	Industrial
% of the water bill	25	70	70	70
Flat rate (TZS/month)	3,000	8,000	8,000	8,000

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Meter Rent Charge	Cesspit emptying
TZS.	TZS.	TZS.	TZS.	TZS.
20,000 – 50,000	10,000 – 20,000	2,000-5,000	500 – 1,000	5,000 – 50,000

Priority of Needs

1. Reduction of NRW; 2. Increase number of connections to the sewerage network; 3. Improve performance of waste stabilization ponds to ensure compliance with effluent standards; and 4. Improve revenue collection efficiency

Consumer Service

Average monthly consumption is about 14.4m^3 per domestic connection, with per capita consumption of 113lts/day. Water is available at an average of 24 hours per day. Water quality compliance with WHO set standards is good with 100% compliance reported for E-Coli and Turbidity. There were 25.6 pipe breaks per km per year recorded and 20.99 sewer blockages per km per year during the year.

Performance Highlights

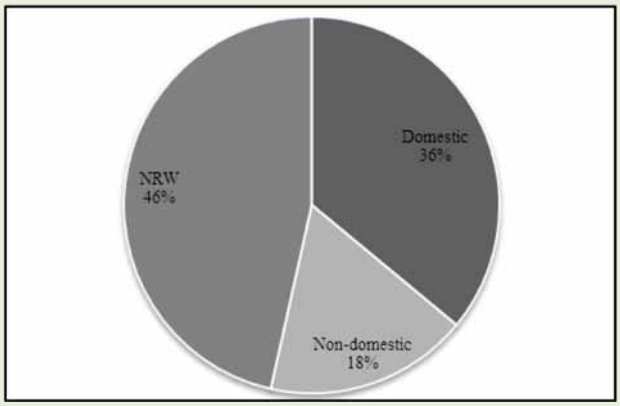
Iringa WSSA provides water supply direct to 95.8% of the population in its service area. NRW is still high at 46.5%. All Iringa WSSA's customers are metered. Operating ratio is also high at 1.77. Accounts receivable equivalent is 3.2 months. Average tariff stands at TZS. 852per m^3 which covers operating expenses. The ratio of Staff per 1000 total water and sewerage connections is 6.0.

IRINGA WATER SUPPLY AND SANITATION AUTHORITY (IRINGA WSSA)

Total Population in the Service Area: 151,345

Production/Distribution	
Average daily production	18,070m^3
Production capacity/day	24,000m^3
Treatment type	Conventional
Storage capacity	6,700m^3
Length of distribution network	379.58km

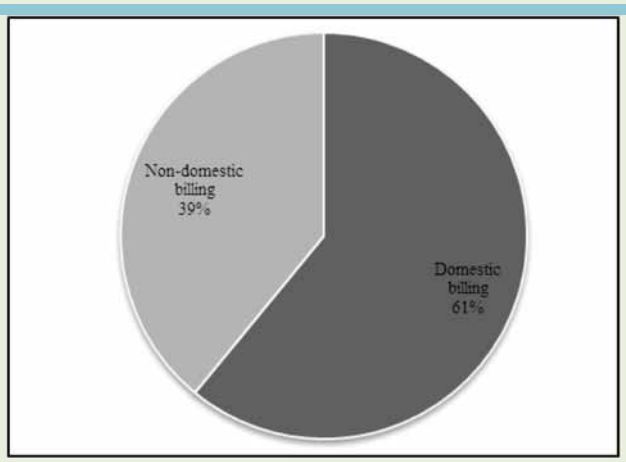
Service Connections	
Total water connections	14,628
Domestic water connections	13,695
Total sewer connections	1,435
Domestic sewer connections	1,326
Metering ratio	100%



ANNUAL WATER USE
6,595,768 m^3

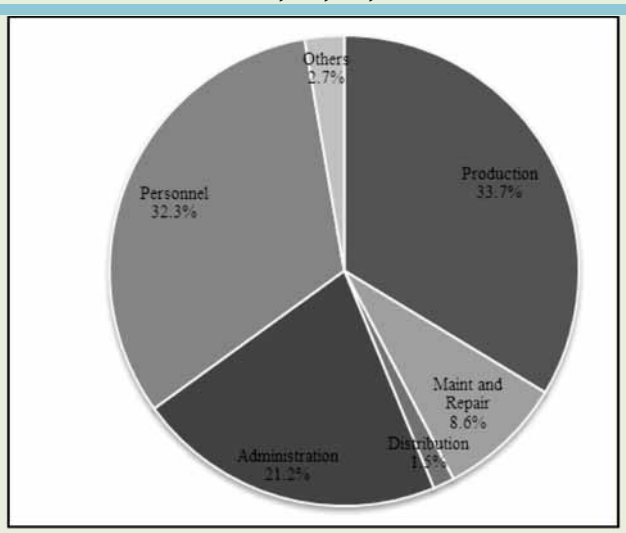
Service Indicators	
Water service coverage	95.8%
Average service hours	24
Per capita consumption	113l/c/d
Average tariff	TZS 852 /m^3

Efficiency Indicators	
Non-Revenue Water	46.5%
Unit Production Cost	TZS 521/m^3
Operating Ratio	1.77
Revenue Collection efficiency	90%
Account Receivable	3.2months
Staff/1000 connections	6



ANNUAL WATER AND SEWERAGE BILLING
TZS 3,480,813,492

Income and Expenditure	
Annual operating income from water and sewerage services	TZS 3,480,813,492
Government /Donor Grants	TZS 60,494,352
Amortized Grants	TZS 2,810,606,884
Other income	TZS 214,107,243
TOTAL INCOME	**TZS 6,566,021,971**
Water Production Expenses	TZS 1,157,114,689
Water distribution expenses	TZS 50,567,158
Maintenance and Repair	TZS 296,746,285
Personnel Expenses	TZS 1,108,483,593
Administration Expenses	TZS 729,943,022
Other O&M Expenses	TZS 93,298,794
Total O&M expenses	**TZS 3,436,153,541**
Depreciation & Amortization	TZS 3,101,021,696
ANNUAL EXPENDITURE	**TZS 6,537,175,237**



ANNUAL O&M COSTS
TZS 3,436,153,541

MBEYA WATER SUPPLY AND SANITATION AUTHORITY (MBEYA WSSA)

Water Utility

Mbeya WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Mbeya City. Mbeya WSSA is classified as a Class A water utility and its area of operation has a total population of 392,179. Proportion of Population Living in the area with water network is 96.9%. The utility draws water from surface (River - 25%) and groundwater sources (spring - 75%). The Utility has a sewerage system with a sewer line length of 100 km and sewage treatment by waste stabilization ponds.

General Data About Water Utility

Total water connections	34,248
Total sewerage connections	1,261
Total staff	222
Annual O&M costs	TZS 5,262,852,063
Annual water and sewerage collections	TZS 4,611,657,895
Annual water and sewerage billing	TZS 5,292,612,576

Tariff Structure

WATER TARIFF

Category	Domestic	Institutional	Commercial	Industrial	Kiosks
TZS./m^3	540 - 740	740 - 840	840 - 940	940-1,090	TZS 10 per 20ltrs

SEWERAGE TARIFF

Category	Domestic	Institutional	Commercial	Industrial
TZS/m3 of water consumed	270	325	375	450
Flat rate	9,000	11,000	16,500	16,500

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	New connection
TZS.	TZS.	TZS.	TZS.	TZS.
11,000-22,000	10,000 - 15,000	2,000	2,500 – 10,000	30,000 – 50,000

Priority of Needs

1. Reduction of NRW 2. Promoting sewerage connections in order to increase sewerage coverage.

Consumer Service

Average monthly domestic consumption is about 14m^3 per connection, with per capita consumption of 58.7lts/day. Water is available at an average 21 hours per day. Water quality compliance to WHO set standards is reported to be good with both E-Coli and Turbidity having 100% compliance. There were 0.5 pipe breaks per km per year recorded and 0.86 sewer blockages per km per year during the year.

Performance Highlights

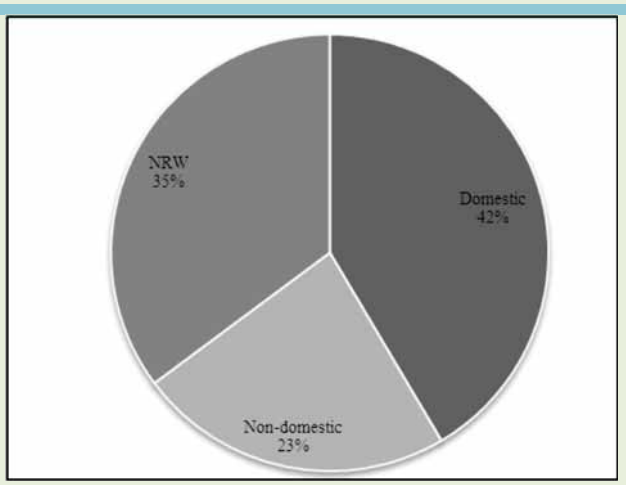
Mbeya WSSA provides direct water supply to 86.79% of the population living in the area with water network. NRW is still high at 35.2%. A bigger portion of customers are metered and currently, the metering ratio is 99%. Operating ratio is 1.22. Accounts receivable equivalent is 3 months. Average tariff stands at TZS 436 per m^3 which covers operating expenses. The ratio of staff per 1000 active water and sewerage connections is 6.3.

MBEYA WATER SUPPLY AND SANITATION AUTHORITY (MBEYA WSSA)

Total Population in the Service Area: 385,275

Production/Distribution	
Average daily production	37,609m^3
Production capacity/day	51,446m^3
Treatment type	Conventional
Storage capacity	23,550m^3
Length of distribution network	682km

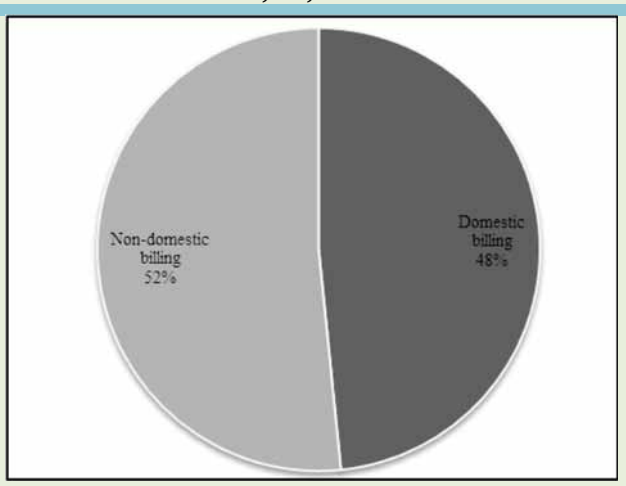
Service Connections	
Total water connections	34,248
Domestic water connections	33,197
Total sewer connections	1,261
Domestic sewer connections	1,160
Metering ratio	99%



ANNUAL WATER USE
13,727,251 m^3

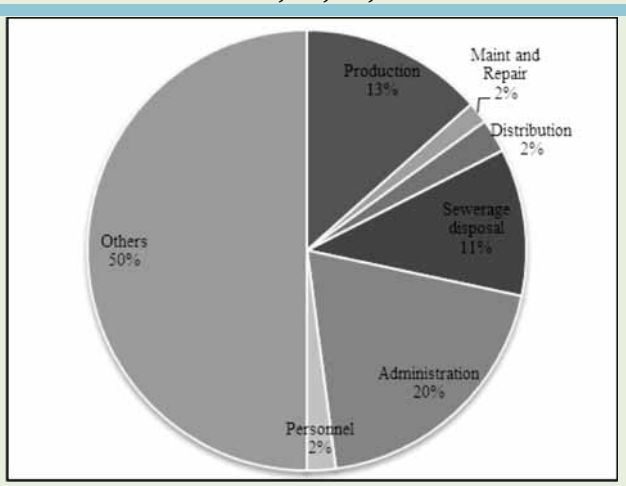
Service Indicators	
Water service coverage	96.9%
Average service hours	21
Per capita consumption	58.7l/c/d
Average tariff	TZS 513/m^3

Efficiency Indicators	
Non-Revenue Water	35.2%
Unit production cost	TZS 383/m^3
Operating ratio	1.2
Revenue collection efficiency	93%
Account receivable	2.9months
Staff/1000 connections	6.3



ANNUAL WATER AND SEWERAGE BILLING
TZS 5,292,612,576

Income and Expenditure	
Annual operating income from water and sewerage services	TZS 5,292,612,576
Government /Donor Grants	TZS -
Amortized Grants	TZS 1,374,694,757
Other income	TZS 537,832,414
TOTAL INCOME	**TZS 7,205,139,747**
Water Production Expenses	TZS 1,413,546,419
Water distribution expenses	TZS 259,701,182
Maintenance and Repair	TZS 167,873,856
Personnel Expenses	TZS 2,059,452,006
Administration Expenses	TZS 1,141,820,401
Other O&M Expenses	TZS 220,458,199
Total O&M expenses	**TZS 5,262,852,063**
Depreciation & Amortization	TZS 1,857,599,995
ANNUAL EXPENDITURE	**TZS 7,120,452,058**



ANNUAL O&M COSTS
TZS 5,262,852,063

MOROGORO URBAN WATER SUPPLY A8mm ND SEWERAGE AUTHORITY (MOROGORO WSSA) Profile

Water Utility

Morogoro WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Morogoro Municipality. Its area of operation has a total population of 315,866 people while the currently served area of the utility with network has a population of 284,279. The current percentage for population coverage is 72%. The Utility draws water from surface (River – 21.48%, dam - 77.77% and CCT borehole – 0.75%). The Utility has a sewerage system with a sewer line length of 31 km and sewage treatment by waste stabilization ponds.

General Data About Water Utility

Total water connections	23,929
Total waste water connections	1,139
Total staff	163
Annual O&M costs	TZS 8,037,638,554
Annual water and sewerage collections	TZS 4,387,080,991.0
Annual water and sewerage billing	TZS 3,755,649,873.0

Tariff Structure

WATER TARIFF

Category	Domestic	Institutional	Commercial	Industrial	Kiosks
TZS./m^3	720	798	945	1,208	542
Flat rate (TZS.)	7,200	7,200	7,200	7,200	-

SEWERAGE TARIFF

Category	Domestic	Institutional	Commercial	Industrial
TZS./m^3 (of the water billed)	144	156	162	180
Flat rate	1,600	1,600	1,600	1,600

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	Emptying into ponds	Fixed charge (New Sewer connection)
TZS.	TZS.	TZS.	TZS.	TZS.	TZS.
35,000	10,000	1,500	2,000	3,000	30,000

Priority of Needs

Based on its Annual report 2012/2013, Morogoro WSSA has set up priority areas to be: 1. Replacement of old infrastructures 2. Improvement of sewerage coverage 3. Protection of water sources especially the protection of Mindu dam 4. Identification of new water sources to cater for the rising demand

Consumer Service

Average monthly consumption is about 16m^3 per connection, with per capita consumption of 29lts/day. Water is available at an average of 17 hours per day. Water quality compliance with WHO set standards are good with E-coli having 100% and turbidity is having 96% compliance. There were 20.86 pipe breaks per km per year recorded and 24 sewer blockages per km per year during the year under review.

Performance Highlights

Morogoro WSSA provides water supply direct to 72% of the population in its service area. NRW has improved and stands at 23%. A bigger portion of customers are metered. The current metering ratio is 91%. Operating ratio is 1.37 and accounts receivable duration is equivalent to 1.1 month. Average tariff stands at TZS. 770 per m^3. The ratio of staff per 1000 total connections ratio is 6.5

MOROGORO URBAN WATER SUPPLY A8mm ND SEWERAGE AUTHORITY (MOROGORO WSSA)
Total Population in the service area: 315,866

Production/Distribution

Average daily production	25,000m^3
Production capacity/day	30,000m^3
Treatment type	Conventional
Storage capacity	9783m^3
Length of distribution network	337km

Service Connections

Total water connections	23,929
Domestic water connections	22,608
Total sewer connections	1,139
Domestic sewer connections	918
Metering ratio	91%

Service Indicators

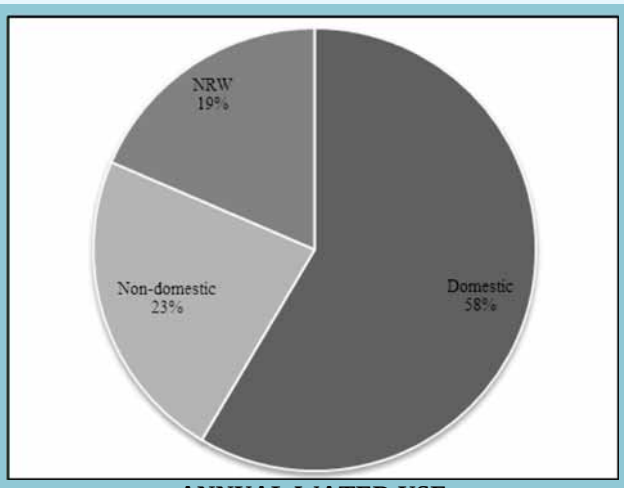
Water service coverage	72%
Average service hours	17
Per capita consumption	29lts/c/d
Average tariff	TZS 770/m^3

Efficiency Indicators

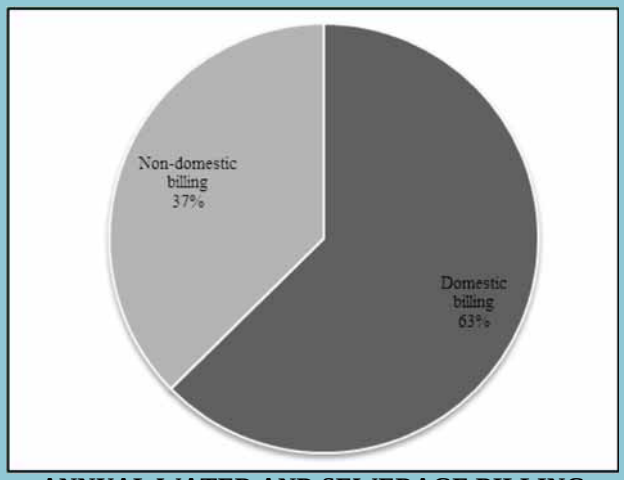
Non-revenue water	23%
Unit production costs	TZS 636/m^3
Operating ratio	1.37
Account receivable	0.7 months
Staff/1000 connections	6.5

Income and Expenditure

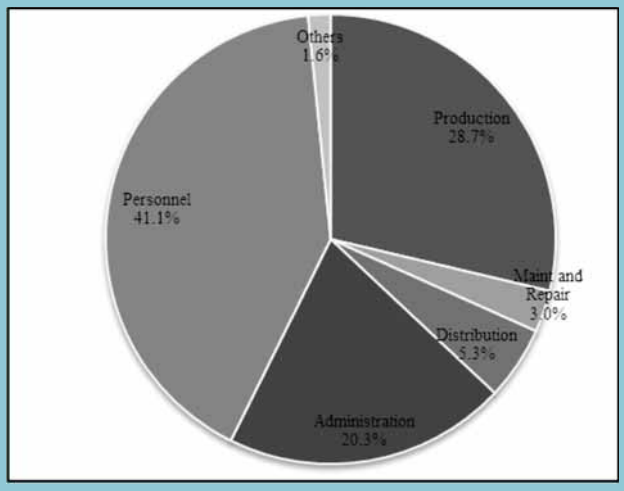
Annual operating income from water and sewerage services	TZS 5,758,124,054
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 103,429,099
TOTAL INCOME	**TZS 5,861,553,153**
Water Production Expenses	TZS 1,565,457,167
Water distribution expenses	TZS 288,449,381
Maintenance and Repair	TZS 163,978,529
Personnel Expenses	TZS 2,239,262,990
Administration Expenses	TZS 1,109,125,617
Other O&M Expenses	TZS 88,052,759
Total O&M expenses	**TZS 5,454,326,443**
Depreciation & Amortization	TZS 2,583,312,111
ANNUAL EXPENDITURE	**TZS 8,037,638,554**



ANNUAL WATER USE
8,572,500 m^3



ANNUAL WATER AND SEWERAGE BILLING
TZS 5,758,124,054



ANNUAL O&M COSTS
TZS TZS 5,454,326,443

MOSHI URBAN WATER SUPPLY AND SANITATION AUTHORITY (MOSHI WSSA) **Profile**

Water Utility

Moshi Urban Water Supply and Sanitation Authority (Moshi WSSA), is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in the Moshi Municipality. Moshi WSSA is classified as Category A water utility and its area of responsibility has a total population of 184,292 people. The operational area of the utility has a population density of 2143 persons/km^2. The utility draws water from three natural spring sources contributing about 84.56% of the daily water production and from three boreholes contributing the remaining 15.44%. The combined production capacity is 31,432m^3/day while water demand stands at 44,307m^3/day. The utility has a sewerage system with sewer line of 56 km in length, and wastewater stabilization ponds as a wastewater treatment system.

General Data About Water Utility

Total water connections	20,776
Total waste water connections	2,260
Total staff	156
Annual O&M costs	TZS 3,496,480,330
Annual water and sewerage collections	TZS 3,162,386,347
Annual water and sewerage billings	TZS 3,667,178,295

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial
Consumption Block	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**
<10 m^3	412	412	469	503
>10m^3 < 30 m^3	447	447	508	545
>30m^3	491	491	560	597

Notes: The Charges at water kiosks are TZS 385 /m^3.

SEWERAGE TARIFF				
Category	**Domestic**	**Institutional**	**Commercial**	**Industrial**
TZS per m^3 of water consumption	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**
	174	174	198	213

Priority of Needs

1. Additional water sources 2. Reduction of non revenue water 3. Expansion and increase number of sewerage connections 4. Customer outreach programme.

Consumer Service

Average monthly water consumption is about 19m^3 per domestic connection with daily per capita consumption of 73 liters. Water is available at an average of 20 hours a day .Water quality is good, with overall average compliance of 98.73. There were 4,502 consumer complaints recorded and were all resolved.

Performance Highlights

Moshi WSSA provides water supply direct to 92.4% of the population in its service area. The NRW is still high at 28.44%. All production points, district zones and service connections are metered. Operating ratio is satisfactory at 0.96 and working ratio at 0.85. Moshi WSSA is providing water service by rationing due to decrease in water production as well as increase in water demand. Accounts receivable equivalent is 3.3 months. Average tariff at TZS 469per m^3 is fair and enough to cover operating expenses and part of investment. Staff/1000 connections ratio is fair at 7.

MOSHI WATER SUPPLY AND SANITATION AUTHORITY (MOSHI WSSA)

Population 184,292

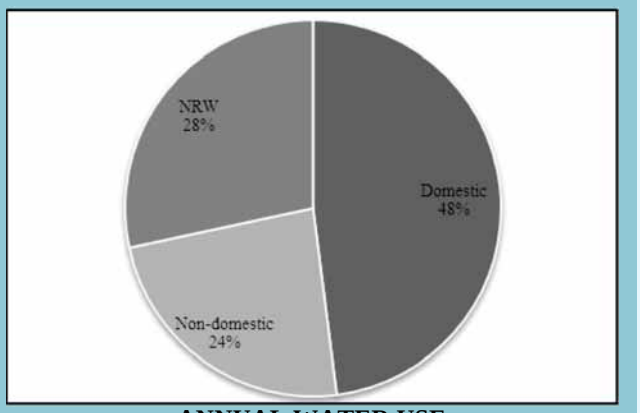
Production/Distribution	
Average daily production	25,072m^3
Production capacity/day	31,432m^3
Treatment type	Chlorine dosing
Storage capacity	8,885m^3
Service area	86km^2
Length of the network	355.5km

Service Connections	
Total water connections	20,776
Domestic water connections	18,855
Total sewer connections	2,260
Domestic sewer connections	1,682
Metered connections	100%

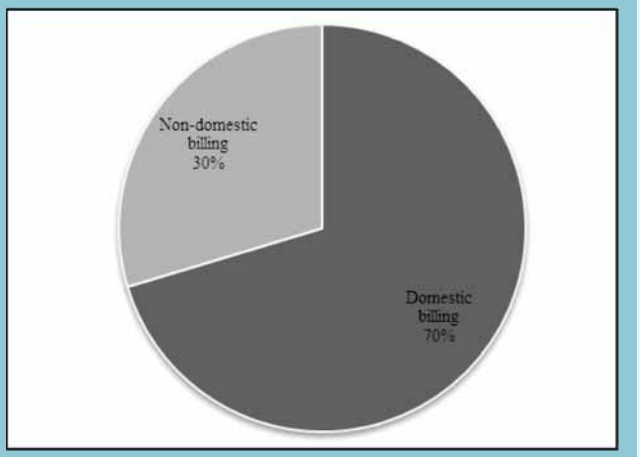
Service Indicators	
Water service coverage	89.4%
Service hours	20hrs
Per capita consumption	73l/c/d
Average tariff	469TZS/m3
Complaints/1000 connections	195

Efficiency Indicators	
Non-Revenue Water	28.4%
Revenue collection efficiency	91%
Unit production cost	429.8TZS/m3
Operating ratio	0.96
Working ratio	0.85
Account receivable	3.3
Staff/1000 connections	7

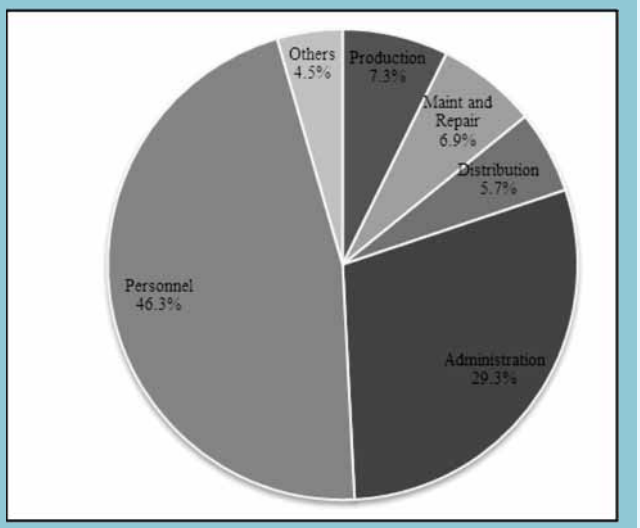
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 3,667,178,245
Government /Donor Grants	TZS -
Amortized Grants	TZS 123,185,798
Other income	TZS 422,599,134
TOTAL INCOME	TZS 4,212,963,177
Water Production Expenses	TZS 254,296,423
Water distribution expenses	TZS 199,303,798
Maintenance and Repair	TZS 240,603,372
Personnel Expenses	TZS 1,619,322,799
Administration Expenses	TZS 1,025,868,965
Other O&M Expenses	TZS 157,084,973
Total O&M expenses	**TZS 3,496,480,330**
Depreciation & Amortization	TZS 436,231,515
ANNUAL EXPENDITURE	**TZS 3,932,711,845**



ANNUAL WATER USE
6,553,040m^3



ANNUAL WATER AND SEWERAGE BILLING
TZS 3,667,178,295



ANNUAL O&M COSTS
TZS 3,496,480,330

MTWARA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MTWARA WSSA) Profile

Water Utility

Mtwara WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Mtwara Municipality. Its area of operation has a total population of 108,299 persons while the current served area of the utility has a population of 94,820. The current percentage population coverage is 88%. The utility draws water from surface and groundwater sources, The major source being the borehole. The utility has neither sewerage system nor sewage treatment plant.

General Data About Water Utility

Total water connections	8,442
Total waste water connections	-
Total staff	63
Annual O&M costs	TZS 1,380,491,313
Annual water and sewerage collections	TZS 877,723,021.0
Annual water and sewerage billing	TZS 1,089,396,700

Tariff Structure

WATER TARIFF

Category	Domestic	Institutions	Commercial	Industrial	Kiosks
TZS./m^3	600	1000	1,100	1,0100	500
Flat rate (TZS.)	5,000 – 15,000	-	-	-	-

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)
TZS.	TZS.	TZS.	TZS.
15,000	10,000	1,000	2,000

Priority of Needs

Based on its business plan and assistance under WSDP projects, Mtwara WSSA has set up priority areas to be: 1. Hours of service increased from 13 to 24hrs per day by 2015 by installation of new pumps at well-field 2. Improve water quality to conform TBS standards 3 by rehabilitating Maghamba treatment plant 3. Water supply coverage be increased from 90 to 95% by 2015 by rehabilitation of the existing distribution network and extending pipeline network to uncovered areas 4. Income and collection be improved to attain 100% collection efficiency 5. To have an efficiently managed public institution in place 6. Sanitation services improved be by 2015 by construction of new sewerage system.

Consumer Service

Average monthly consumption is about 11m^3 per connection, with per capita consumption of 26.7lts/c/day. Water is available at an average 14 hours per day. Water quality compliance with WHO set standards for E-coli was 76% compliance and Turbidity having 100% compliance. There were 1.14 pipe breaks per km per year recorded during the year.

Performance Highlights

Mtwara WSSA provides water supply direct to 51.6% of the population in its service area. There is increase in NRW which currently stands at 37.9%. All customers are metered thus having metering ratio of 100%. Operating ratio is at 1.37 while accounts receivable equivalent is 3.9 months. Average tariff stands at TZS. 696.38 per m^3. The ratio of staff per 1000 total connections ratio is 7.2.

MTWARA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MTWARA WSSA)
Population in the service area: 108,299

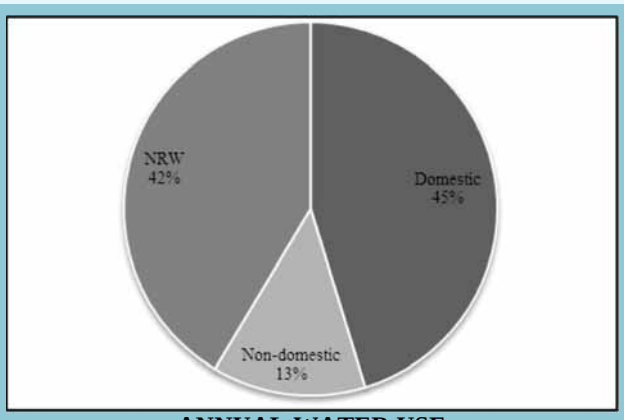
Production/Distribution	
Average daily production	6,389 m^3
Production capacity/day	8,500m^3
Treatment type	Chlorination
Storage capacity	3,715m^3
Length of distribution network	221km

Service Connections	
Total water connections	8,442
Domestic water connections	7,980
Total sewer connections	-
Domestic sewer connections	-
Metering ratio	100%

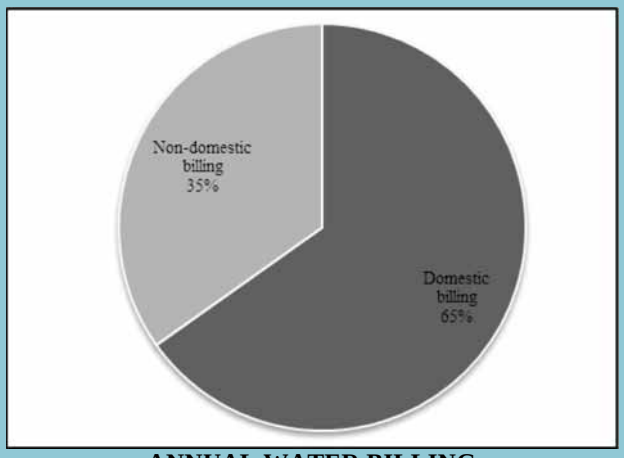
Service Indicators	
Water service coverage	51.6%
Average service hours	13
Per capita consumption	26.7lts/c/d
Average tariff	TZS 696/m^3

Efficiency Indicators	
Non-revenue water	41.4%
Unit production costs	TZS 740/m^3
Operating ratio	1.37
Account receivable	3.9 months
Staff/1000 connections	7.2

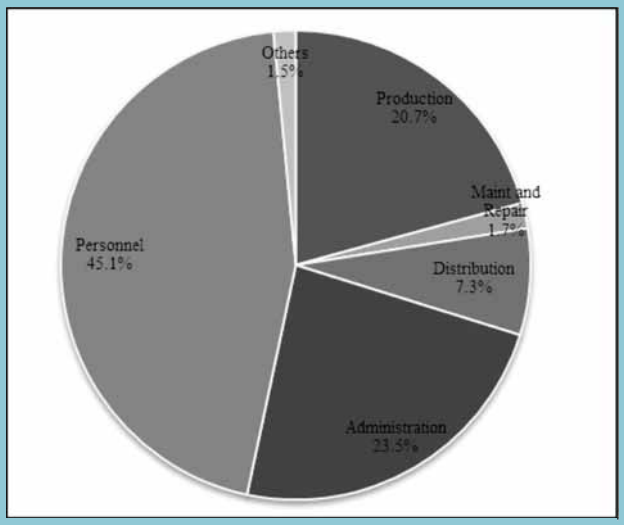
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 1,089,396,700
Government /Donor Grants	TZS 22,553,069
Amortized Grants	TZS 32,590,338
Other income	TZS 169,584,666
TOTAL INCOME	**TZS 1,314,124,773**
Water Production Expenses	TZS 286,270,749
Water distribution expenses	TZS 101,221,369
Maintenance and Repair	TZS 24,113,086
Personnel Expenses	TZS 623,141,709
Administration Expenses	TZS 324,684,813
Other O&M Expenses	TZS 21,059,587
Total O&M expenses	**TZS 1,380,491,313**
Depreciation & Amortization	TZS 345,691,492
ANNUAL EXPENDITURE	**TZS 1,726,182,805**



ANNUAL WATER USE
2,310,214 m^3



ANNUAL WATER BILLING
TZS 1,089,396,700



ANNUAL O&M COSTS
TZS 1,380,491,313

MUSOMA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MUSOMA WSSA) Profile

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 the Musoma Municipality. Its area of responsibility has a total population of 134,327 people, of which 89,341 people are living within the area with water supply network. The water supply network has a total length of 120km of pipelines. The utility draws water from 3 Lake Victoria intakes, namely Mwisenge, Mutex and Bweri intakes, Mwisenge produces about 98% of water produced by MUWASA. The combined installed production capacity is 15,188m^3/day. During the reported year, water production was 58.7% of water demand. The utility has no sewerage system. MUWASA has 78 employees, of which 16 are permanent and the rest are long term and short term contractual staff of different qualifications and professions..

General Data About Water Utility

Total water connections	9,569
Total waste water connections	NIL
Total staff	78
Annual O&M costs	TZS 1,722,498,706
Annual collections	TZS 1,600,949,724
Annual billings& sewerage sales	TZS 1,519,896,974

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial
Consumption Charge	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3
	505-675	620-785	730-845	730-845

Notes: The Charges at water kiosks are TZS 335/m^3.

Flat rates charges

Category	Domestic	Institutional	Commercial	Industrial
Consumption Charge	TZS/month	TZS/month	TZS/month	TZS/month
	8,000	24,000	24,000	34,000

OTHER CHARGES

New connection (water)	Service charge
TZS.	TZS.
25,000-50,000	2,000-3,000

Priority of Needs

1. Reduction of Non-Revenue Water. 2. Improvement on production to cater for demand 3. Improvement on service coverage. 4. Metering.
5. Construction of water treatment plant and sewerage system 6. Improvement on storage capacity

Consumer Service

Average monthly consumption is about 13.5m^3 per domestic connection. Water is available at an average of 18.9 hours a day .Water quality is poor as the average compliance was reported as 49% with regards to turbidity, residual chlorine, pH and E-coli parameters. There were 1,808 consumer complaints recorded and 364 water pipe leaks repaired during the year.

Performance Highlights

Musoma WSSA provides water supply direct to 66.5% of the population in its service area. The NRW is still high at 45.3%. Operating ratio is at 1.06. Accounts receivable equivalent is 2.7 months. Average tariff at TZS 672 per m^3 to cover operating expenses and part of investment. Staff/1000 connections ratio is not good at 8

MUSOMA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MUSOMA WSSA)

Total Population: 134,327

Production/Distribution

Average daily production	10,461m^3
Production capacity/day	15,188m^3
Treatment type	Chlorination
Storage capacity	1,607.5m^3
Service area	63km^2
Distribution pipe network	120km

Service Connections

Total water connections	9,569
Domestic water connections	8,841
Total Sewer connections	NIL
Domestic sewer connections	NIL

Service Indicators

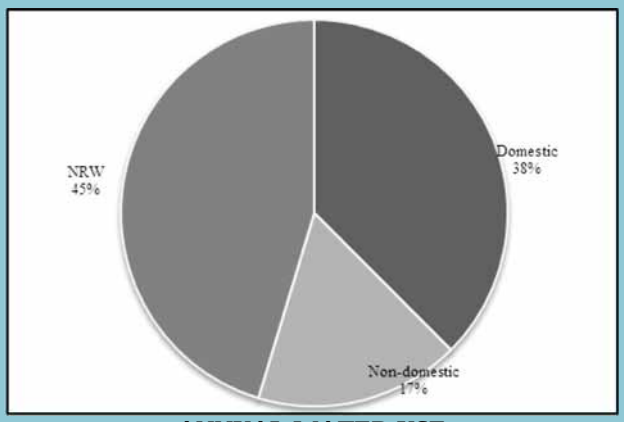
Water service coverage	66.5%
Service hours	18.9hrs
Per capita consumption	30.6l/c/d
Average tariff	672/m^3

Efficiency Indicators

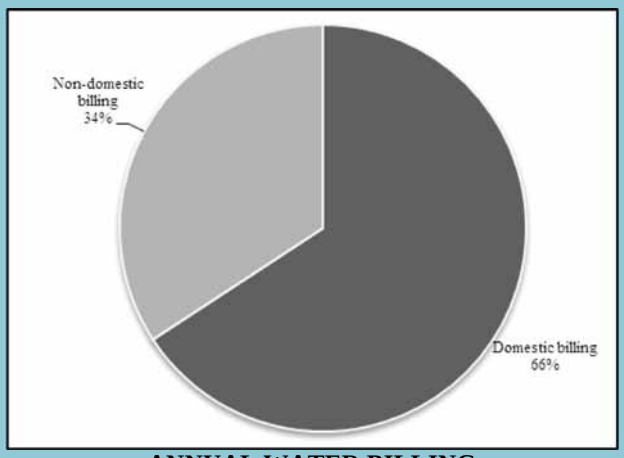
Non-Revenue Water	45.3%
Unit production cost	451 TZS/m^3
Operating Ratio	1.06
Account receivable	2.7
Staff/1000 connections	8

Income and Expenditure

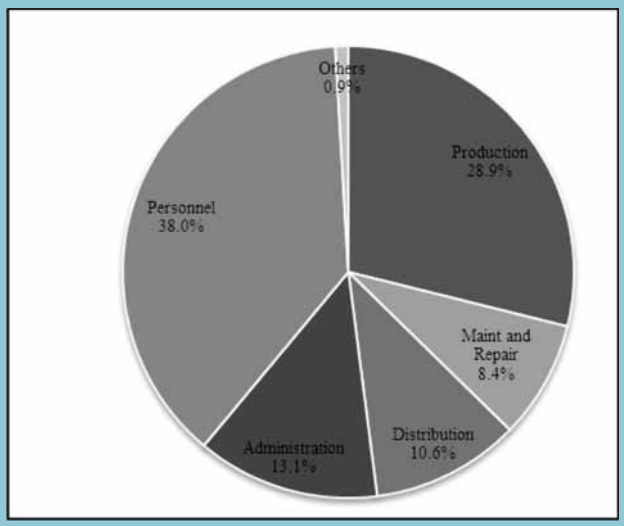
Annual operating income from water and sewerage services	TZS 1,519,896,974
Government /Donor Grants	TZS 115,063,648
Amortized Grants	TZS 33,593,362
Other income	TZS 107,241,492
TOTAL INCOME	**TZS 1,775,795,476**
Water Production Expenses	TZS 497,466,358
Water distribution expenses	TZS 183,210,227
Maintenance and Repair	TZS 145,464,366
Personnel Expenses	TZS 654,802,561
Administration Expenses	TZS 225,491,916
Other O&M Expenses	TZS 16,063,279
Total O&M expenses	**TZS 1,722,498,706**
Depreciation & Amortization	TZS -
ANNUAL EXPENDITURE	**TZS 1,722,498,706**



ANNUAL WATER USE
3,818,406 m^3



ANNUAL WATER BILLING
TZS 1,519,896,974



ANNUAL O&M COSTS
TZS 1,722,498,707

MWANZA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MWANZA WSSA) **Profile**

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 the Mwanza City. Its area of responsibility has a total population of 736,939 people. The water supply network has a total length of 631.7km of pipelines. The utility draws water from Lake Victoria at three different locations namely, Capri point, Chakula Barafu and Luchelele. The combined production capacity is 108,000m^3/day. Water production is half of the water demand in which the proportion of water production to water demand stood at 57.2%. The utility has a sewerage system with a sewer line of 61km long and wastewater stabilization ponds as a wastewater treatment system. Mwanza WSSA has 285 employees, 282 permanent and long-term contractual and 3 short-term contractual staff of different qualifications and professions.

General Data About Water Utility

Total water connections	42,486
Total waste water connections	3,192
Total staff	285
Annual O&M costs	TZS 11,866,490,445
Annual collections	TZS 13,199,871,217
Annual billings& sewerage sales	TZS 12,381,552,842

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial	Bottling	Construction
Consumption Charge	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3
	615	660	1,045	1,330	2,375	1,330

Notes: The Charges at water Kiosks are TZS 385 /m^3.

SEWERAGE TARIFF

Category	Domestic	Institutional	Commercial	Industrial
TZS per month	250-300	300	470	600

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	New connection (sewer)
TZS.	TZS.	TZS.	TZS.	TZS.
21,000-151,000	7,500-20,000	1,400	2,000-6,000	5,000

Priority of Needs

1. Reduction of Non-Revenue Water. 2. Improve water and sewerage coverage%. 3. Recovery of arrears 4. Improved water production

Consumer Service

Average monthly consumption is about 14.6m^3 per domestic connection. Water is available at an average of 22 hours a day .Water quality is good, with 100% of water samples taken during the year passing the E-coli tests. There were 2,293 consumer complaints recorded and 21 water pipe breaks per year.

Performance Highlights

Mwanza WSSA provides water supply direct to 72.5% of the population in its service area. NRW is still high at 40.7%. All production points, district zones are metered as well as all service connections. Operating ratio is at 1.12. Accounts receivable equivalent is 2.73months. Average tariff is TZS 808.72 per m^3 is fair to cover operating expenses and part of investment. Staff/1000 connections ratio is good at 6.2.

MWANZA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MWANZA WSSA)

Total Population in the Service Area: 736,939

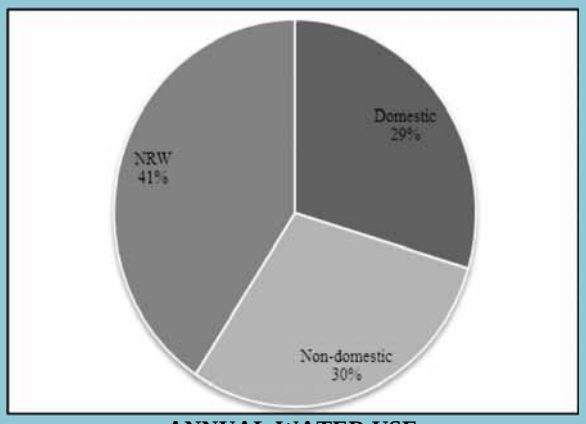
Production/Distribution	
Average daily production	63,186m^3
Production capacity/day	108,000m^3
Treatment type	Conventional
Storage capacity	36,464m^3
Service area	450km^2
Length of distribution network	631.7km

Service Connections	
Total water connections	42,486
Domestic water connections	39,060
Total sewer connections	3,192
Domestic sewer connections	2,523
Metered connections	40,790

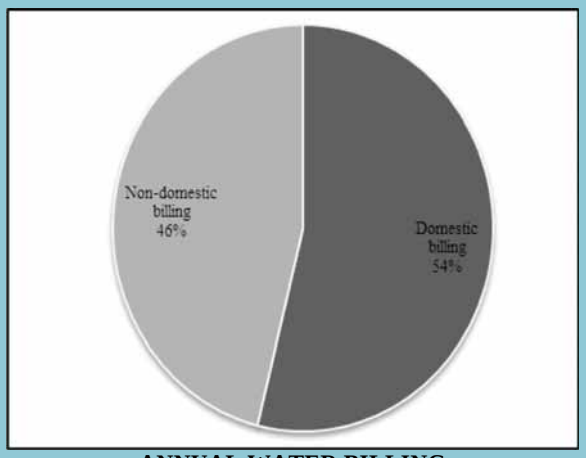
Service Indicators	
Water service coverage	72.5%
Average service hours	22
Per capita consumption	40.6l/c/d
Average tariff	805 TZS/m^3

Efficiency Indicators	
Non-Revenue Water	40.7%
Unit production cost	514.5TZS/m^3
Operating ratio	1.12
Account receivable	2.73months
Staff/1000 connections	6.2

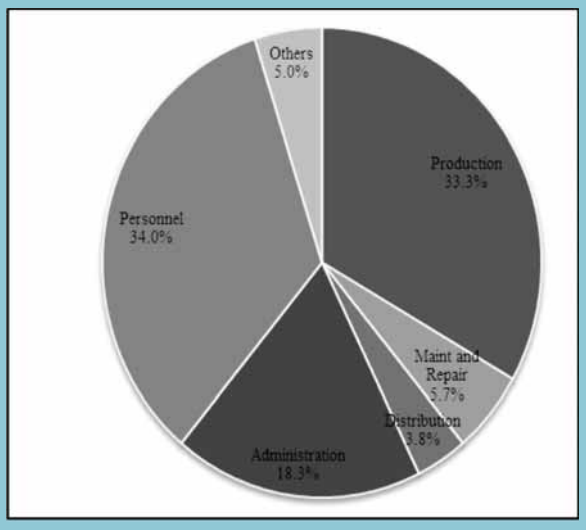
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 12,381,552,842
Government /Donor Grants	TZS -
Amortized Grants	TZS 1,772,269,498
Other income	TZS 371,877,064
TOTAL INCOME	**TZS 14,525,699,404**
Water Production Expenses	TZS 3,949,029,833
Water distribution expenses	TZS 451,352,942
Maintenance and Repair	TZS 672,519,760
Personnel Expenses	TZS 4,032,316,511
Administration Expenses	TZS 2,172,646,304
Other O&M Expenses	TZS 588,625,095
Total O&M expenses	**TZS 11,866,490,445**
Depreciation & Amortization	TZS 2,450,147,781
ANNUAL EXPENDITURE	**TZS 14,316,638,226**



ANNUAL WATER USE
23,062,806 m^3



ANNUAL WATER BILLING
TZS 12,381,552,842



ANNUAL O&M COSTS
TZS 11,866,490,445

SHINYANGA URBAN WATER SUPPLY AND SANITATION AUTHORITY (SHINYANGA WSSA)

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. Its area of operation has a total population of 161,391 people (as per 2012 census data) while population directly served with water is 70,975, equivalent to 44% of the total population. This has significantly dropped from the lasy year's estimation of 71.2%. Shinyanga WSSAs explained that the decrease is due to the expansions of the Shinyanga Municipality area from 12 to 17 wards, consequently increasing the service area. Also the census data has provided much more reliable population figures than those which were estimated in the previous year. Shinyanga WSSA 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. All the water sources and the bulk water supply have combined capacity of *53,100m^3/day* which is higher above the daily water demand of *16,848 m^3/day*. However, due to insufficient water distribution network coverage, only an average of *8,520 m^3/day* was supplied. Shinyanga WSSA does not render sewerage services, but plans are underway to procure a consultant to do the feasibility study. Shinyanga WSSA has a total of 74 staff which translate to a staff per 1000 connections ratio of 5.1.

General Data About Water Utility

Total active water connections	14,326
Total staff	74
Annual O&M costs	TZS 2,531,588,393.00
Annual water collection (from water sales)	TZS 2,573,566,397.00
Annual water billing	TZS 2,467,647,210.00

Tariff Structure

WATER TARIFF AND CHARGES

Category	Domestic	Institutions	Commercial	Industrial	Kiosks
TZS./m^3	750 - 950	950 - 1200	950 - 1200	1050 - 1300	1000
Flat rate (TZS.)	8,250	18,750	18,750	-	-
Service Charges (TZS/Month)	2,000	3,500	3,500	3,700	-

Priority of Needs

1. Lack of sewerage services; 2. Failure to extend the water distribution network to un-supplied areas;

Consumer Service

Average monthly consumption is about 14.1 m^3 per connection, with per capita consumption of 93.6lts/day. Water is available at an average of 21.3 hours per day. Water quality compliance with WHO set standards is generally good with E-coli and Turbidity having 100% and 96% compliance respectively. There were 0.3 pipe breaks/leaks per km per year recorded.

Performance Highlights

Service coverage has decreased from 71.2% in the previous year to 44% in this year. NRW has improved significantly from an average of 30.7% reported last year to an average of 22% during the reporting period. Metering ratio has reached 100%. Accounts receivable equivalent is 2.6 months. Average tariff stands at TZS. 923.33 per m^3 which covers operating expenses. Staff per 1000 total connections ratio has improved from 6.6 in the last year to 5.1 during the reporting period.

SHINYANGA URBAN WATER SUPPLY AND SANITATION AUTHORITY (SHINYANGA WSSA)

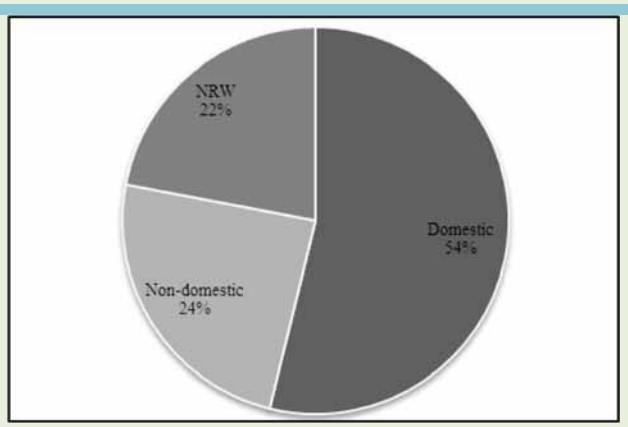
Total Population in the Service Area:161,391

Production/Distribution

Average daily production	8,520 m^3
Production capacity/day	53,100
Treatment type	Conventional
Storage capacity	21,840m^3
Length of distribution network	439.6km

Service Connections

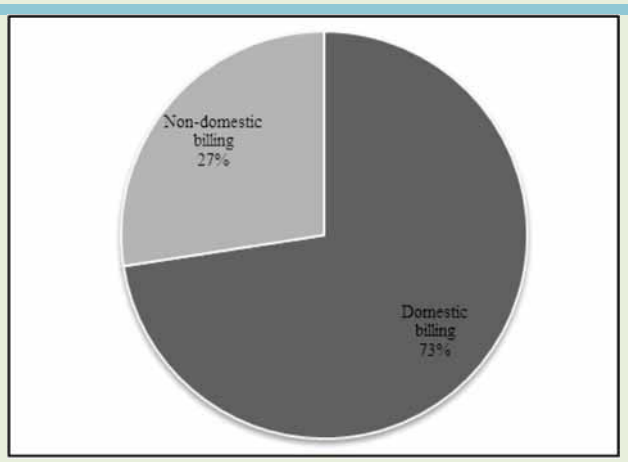
Total water connections	14,566
Domestic water connections	13,525
Metering ratio	99.6%
Domestic metered connections	13,525



ANNUAL WATER USE
3,109,843 m^3

Service Indicators

Water service coverage	44%
Average service hours	21.3
Per capita consumption	93.6l/c/d
Average tariff	TZS 923/m^3



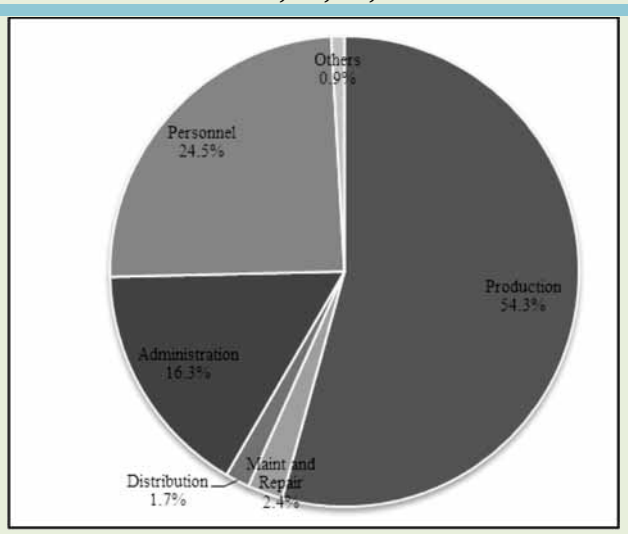
ANNUAL WATER BILLING
TZS 2,467,647,210

Efficiency Indicators

Non-revenue water	22%
Unit production cost	TZS 442/m^3
Account receivable	2.6 months
Operating Ratio	1.11
Staff/1000 connections	5.1

Income and Expenditure

Annual operating income from water and sewerage services	TZS 2,467,647,210
Government /Donor Grants	TZS -
Amortized Grants	TZS 222,784,295
Other income	TZS 316,515,923
TOTAL INCOME	**TZS 3,006,947,428**
Water Production Expenses	TZS 1,374,394,001
Water distribution expenses	TZS 42,289,913
Maintenance and Repair	TZS 61,293,420
Personnel Expenses	TZS 619,199,420
Administration Expenses	TZS 411,500,276
Other O&M Expenses	TZS 22,911,363
Total O&M	**TZS 2,531,588,393**
Depreciation & Amortization	TZS 550,797,618
ANNUAL EXPENDITURE	**TZS 3,082,386,011**



ANNUAL O&M COSTS
TZS 2,531,588,393

SONGEA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (SONGEA WSSA)

Water Utility

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 203,309. Proportion of Population Living in the area with water network is 64.2%. The utility draws water from surface (spring 68% and river/shallow well - 32%). 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^3/day (426,950m^3/year).

General Data About Water Utility

Total water connections	10,666
Total waste water connections	1,054
Total staff	58
Annual O&M costs	TZS 1,832,013,732
Annual water and sewerage collections	TZS 1,211,557,037
Annual water and sewerage billing	TZS 1,351,644,555

Tariff Structure

WATER TARIFF

Category	Domestic	Institutional	Commercial	Industrial	Kiosks
TZS./m^3	580 - 650	600 - 650	650 - 700	650 - 700	500
Flat rate (TZS)	2,500 – 4,000	7,500	10,000	-	-

SEWERAGE TARIFF

Category	Domestic	Institutional	Commercial	Industrial
Percentage of the water bill (%)	40	40	40	40

Priority of Needs

Based on its business plan under WSDP, Songea WSSA has set up priority areas to be: 1. Increasing water production and expansion of distribution system 2. Expand present coverage of sewerage disposal services 3. Improving revenue collection through universal metering 4. To improve water quality by expanding existing treatment plant 5. Water sources conservation through fencing of all water sources and intakes 6. To build capacity of workforce and improve customer satisfaction through recruitments of new competent staffs 7. To attain lower costs of water production and sanitation services 8. Enhance collaboration with other stakeholders by making them fully aware of Songea WSSA's activities.

Consumer Service

Average monthly consumption is about 12m^3 per connection, with per capita consumption of 93lts/day. Water is available at an average of 17 hours per day. Water quality compliance with WHO set standards is good at 100% compliance. There were 0.7 pipe breaks per km per year recorded and 5.76 sewer blockages per km per year during the year

Performance Highlights

Songea WSSA provides direct water supply to 61.2% of the population living in the area with water network. NRW has been reduced and currently stands at 26.9%. A bigger portion of customers are metered with current metering ratio at 88.7%. Operating ratio stands at 2.30 and Accounts receivable is equivalent to 1.7months. Average tariff stands at TZS. 607 per m^3. The number of staff per 1000 total connections ratio stands at 4.9.

SONGEA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (SONGEA WSSA)

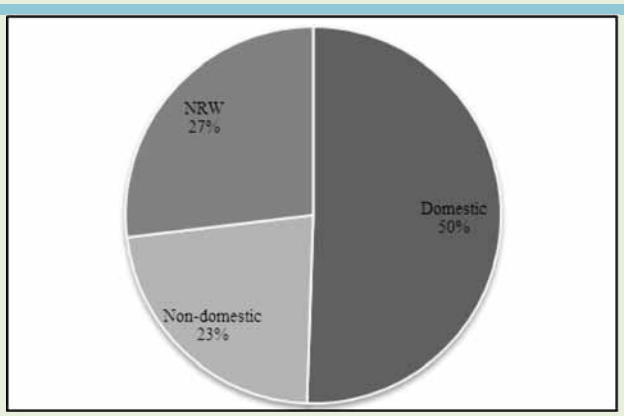
Total Population in the Service Area: 203,309

Production/Distribution

Average daily production	7,685m^3
Production capacity/day	11,500m^3
Treatment type	Chlorination
Storage capacity	4,025m^3
Length of distribution network	304km

Service Connections

Total water connections	10,666
Domestic water connections	9,912
Total sewer connections	1,054
Domestic sewer connections	922
Metering ratio	88.7%



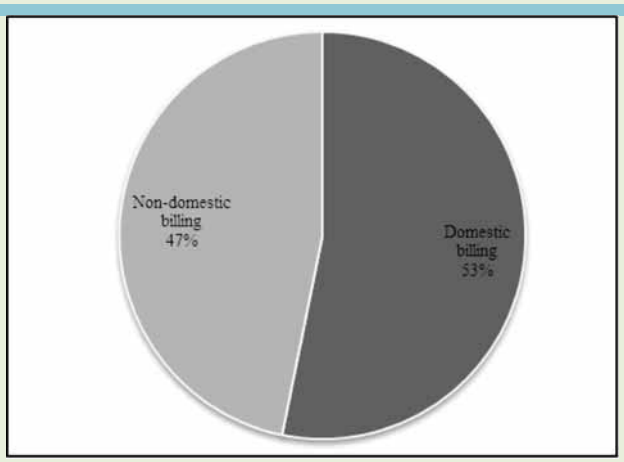
ANNUAL WATER USE
2,805,094 m^3

Service Indicators

Water service coverage	76.5%
Average service hours	17.1
Per capita consumption	93lts/c/d
Average tariff	TZS 607/m^3

Efficiency Indicators

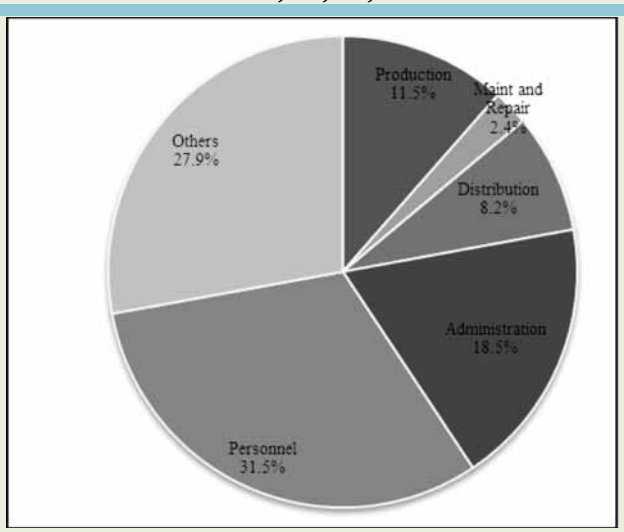
Non-revenue water	26.9%
Unit production costs	TZS 407/m^3
Operating ratio	2.30
Account receivable	1.7 months
Staff/1000 connections	4.9



ANNUAL WATER AND SEWERAGE BILLING
TZS 1,425,648,595

Income and Expenditure

Annual operating income from water and sewerage services	TZS 1,351,644,555
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 133,441,829
TOTAL INCOME	**TZS 1,485,086,384**
Water Production Expenses	TZS 210,583,031
Water distribution expenses	TZS 149,838,440
Maintenance and Repair	TZS 44,872,825
Personnel Expenses	TZS 576,730,562
Administration Expenses	TZS 339,662,844
Other O&M Expenses	TZS 510,326,030
Total O&M expenses	**TZS 1,832,013,732**
Depreciation & Amortization	TZS 1,590,485,810
ANNUAL EXPENDITURE	**TZS 3,422,499,542**



ANNUAL O&M COSTS
TZS 1,832,013,732

TABORA URBAN WATER SUPPLY AND SANITATION AUTHORITY (TABORA WSSA)

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 226,999 people as per 2012 census data, while the current proportion of population directly served with water is 71%. About 97% of the water supply in Tabora comes from Igombe dam. The remaining amount is supplied from Kazima dam and Kitete shallow well. The combined water produced from the three sources during the reporting period was 4,345,323m^3 which was just about half the town's water demand of 8,858,550m3/year. Completion of WSDP project which included rehabilitation of the existing water treatment plant and the distribution system and construction of a new treatment plant near Igombe dam so as to increase the production capacity, contributed to the 9% increase in water production when compared to the previous year's production.

General Data About Water Utility

Total active water connections	7,354
Total waste water connections	301
Total staff	93
Annual O&M costs	TZS 2,353,876,440
Annual water and sewarage collections	TZS 1,637,214,600
Annual water and sewerage billing	TZS 2,174,874,387

Tariff Structure

WATER TARIFF

Category	Domestic	Institutions	Commercial	Industrial	Kiosks
TZS./m^3	540 - 720	630 - 670	900 - 1170	1170 - 1260	900
Flat rate (TZS.)	12,000	25,000	25,000	30,000	-

SEWERAGE TARIFF

Category	Domestic	Institutions	Commercial	Industrial
TZS/m^3	200	500	500	500
Flat rate	3,000-5,000	15,000-25,000	15,000-25,000	15,000-25,000

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	Meter Rent
TZS.	TZS.	TZS.	TZS.	TZS.
30,000-80,000	10,000-80,000	3,000	5,000	1,500 – 5,000

Priority of Needs

1. Extension of water distribution network to un-supplied areas; 2. Exploration of alternative water sources; 3. Improvement of sewerage services and infrastructure.

Consumer Service

Average daily consumption is about 1,089 litres per connection, with per capita consumption of 49.5lts/day. Water is available at an average of 18.2 hours per day. Water quality compliance with WHO set standards is fair with E-coli and turbidity having 100% and 92% compliance respectively. There were 0.6 pipe breaks per km per year recorded and 5.65 sewer blockages per km during the year.

Performance Highlights

Service coverage has slightly improved from 68.1% to 71% of the population being directly served with water. Sewerage coverage has also slightly improved from 6% to 7.1%. NRW has worsened from 25% to 32.7%. Metering ratio has improved from 59% to 62.1%, with all the active connections installed with meters. Staff per 1000 connections has improved from 8.2 to 7.7. Accounts receivable is relatively big equivalent to 6.5 months of water bills revenues. Average tariff stands at 695 TZS/m^3.

TABORA URBAN WATER SUPPLY AND SANITATION AUTHORITY (TABORA WSSA)

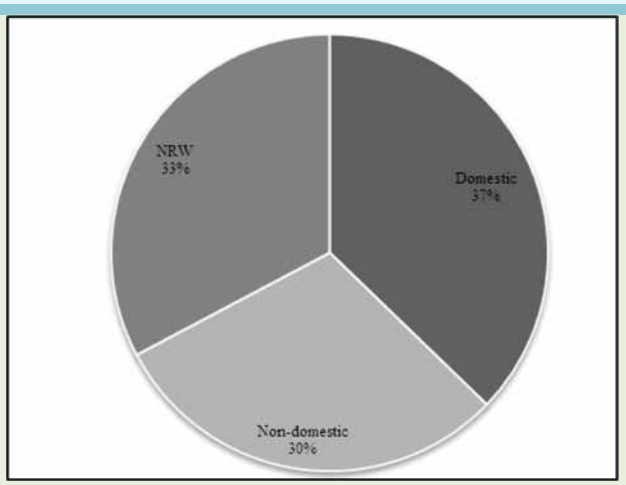
Total Population in the Service Area:226,999

Production/Distribution

Average daily production	11,905m^3
Production capacity/day	17,400m^3
Treatment type	Conventional
Storage capacity	5,865m^3
Length of distribution network	260km

Service Connections

Total water connections	11,837
Domestic water connections	10,977
Total sewer connections	301
Domestic sewer connections	240
Metering ratio	62.1%



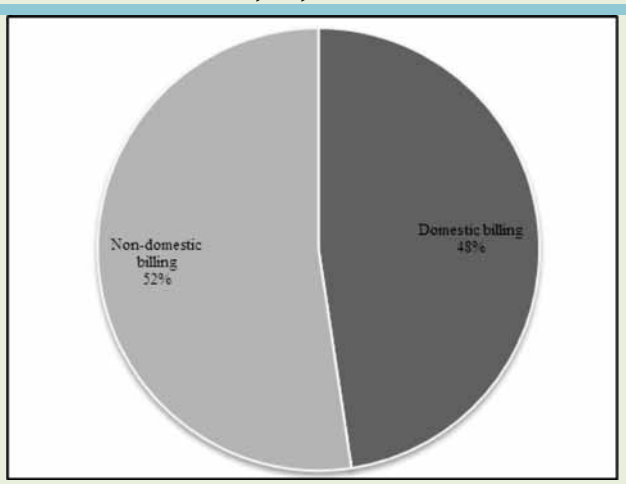
ANNUAL WATER USE
4,345,323 m^3

Service Indicators

Water service coverage	71%
Average service hours	18.2
Per capita consumption	49.5l/c/d
Average tariff	695TZS/m^3

Efficiency Indicators

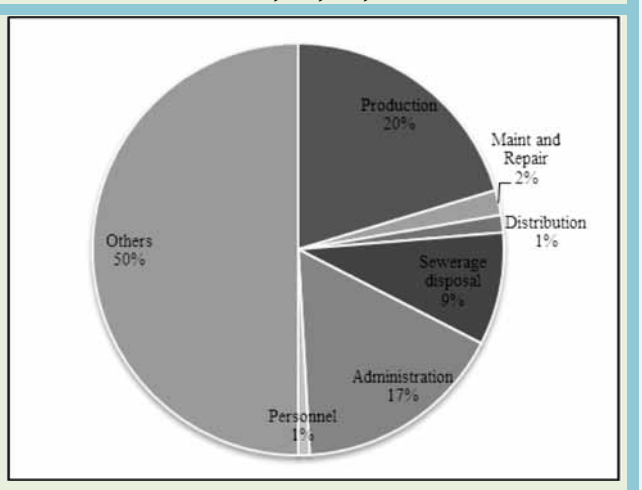
Non-revenue water	32.7%
Unit production cost	221 TZS/m^3
Operating ratio	0.99
Account receivable	6.5 months
Staff/1000 connections	7.7



ANNUAL WATER & SEWERAGE BILLING
TZS 2,174,874,387

Income and Expenditure

Annual operating income from water and sewerage services	TZS 2,174,874,387
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 574,838,790
TOTAL INCOME	**TZS 2,749,713,177**
Water Production Expenses	TZS 959,079,975
Water distribution expenses	TZS 64,086,427
Maintenance and Repair	TZS 92,257,623
Personnel Expenses	TZS 779,654,151
Administration Expenses	TZS 416,779,382
Other O&M Expenses	TZS 42,018,882
Total O&M Expenses	**TZS 2,353,876,440**
Depreciation & Amortization	TZS 366,388,927
ANNUAL EXPENDITURE	**TZS 2,720,265,367**



ANNUAL O&M COSTS
TZS 2,353,876,440

TANGA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (TANGA WSSA) **Profile**

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 273,332 people. The present service area of the utility has a population density of 1,051persons/km^2. The utility draws water from one source, the Mabayani dam, with storage volume of 7,700,000m^3 and installed production capacity of 42,000m^3/day. The utility has a sewerage system with sewer line length of 34.84km with no treatment system. The average wastewater generation of 2164 m^3/day is being discharged directly into the Indian Ocean.

General Data About Water Utility

Total water connections	27,358
Total waste water connections	2,593
Total staff	151
Annual O&M costs	TZS 5,295,605,142
Annual water and sewerage collections	TZS 5,643,065,000
Annual water and sewerage billings	TZS 5,907,365,779

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial	Big Consumer
Consumption band	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**
0 - 5	700	700	na	Na	860
>5 -10	750	750	860	na	
>10 - 30	800	820	950	950	
>30	950	950	1,030	1,100	

Notes: The Charges at water Kiosks are TZS 10 per 20litre bucket.

SEWERAGE TARIFF

Category	Domestic	Institutional	Commercial	Industrial	Average Tariff
TZS per m^3 of 80% of consumed water	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**
	150	250	278	302	

Priority of Needs

1. Construction of waste water treatment plant; 2. Expansion of Mowe water treatment plant 3. Replacement of old pipes and reduction of NRW to acceptable level 5. Increase number of sewerage connections.

Consumer Service

Average monthly consumption is about 18m^3 per domestic connection with per capita consumption of 67 litres. Water is available at an average of 23.50 hours per day .Water quality compliance to the required standard was 99.09%. There were 89 consumer complaints per 1000 connections.

Performance Highlights

Tanga UWSA provides water supply direct to 92% of the population in its service area (administrative boundary of Tanga city) while the community schemes within the licensed area serve 2.5% making overall service coverage 94.5%. The average Non-Revenue water is at 25.91%. All production points and service connections are metered. Operating ratio is high at 1.04 while working ratio is 0.83. Accounts receivable equivalent is good at 1.8 months. Weighted average tariff stood at TZS 698 per m^3 which is fair and enough to cover operating expenses and part of investment. The number of staff per 1000 connections is good at 5.04. Wastewater treatment plant is highly needed to avoid direct discharging of untreated sewage.

TANGA WATER SUPPLY AND SANITATION AUTHORITY (TANGA WSSA)

Total Population in the Service Area: 305,713

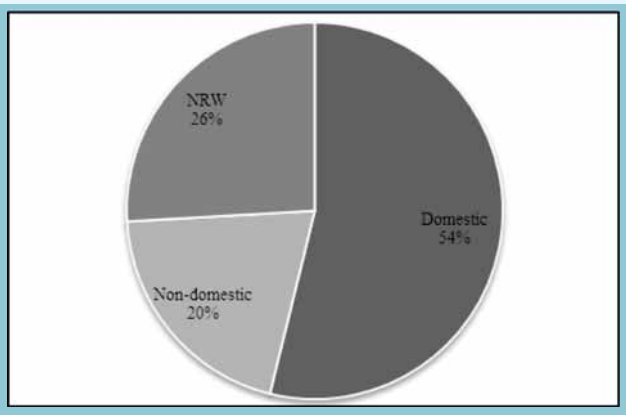
Production/Distribution	
Average daily production	28,492 m^3
Production capacity/day	42,000 m^3
Treatment type	Conventional
Storage capacity	10,070m^3
Service area	260km^2
Distribution pipe network	551km

Service Connections	
Total water connections	27,358
Domestic water connections	25,727
Total Sewer connections	2,593
Domestic sewer connections	2,335
Metered connection	100%

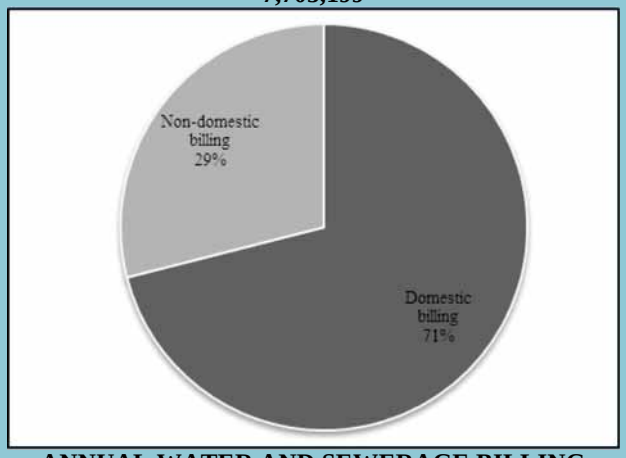
Service Indicators	
Water service coverage	94.5%
Service hours	23.5hrs
Per capita consumption	67l/c/d
Average tariff	698 TZS/m^3
Complaints/1000 connection	89

Efficiency Indicators	
Non-Revenue water	25.91%
Revenue collection efficiency	97.8%
Unit production cost	635.4TZS/m3
Operating ratio	1.04
Working ratio	0.83
Account receivable	1.8
Staff/1000 connections	5.04

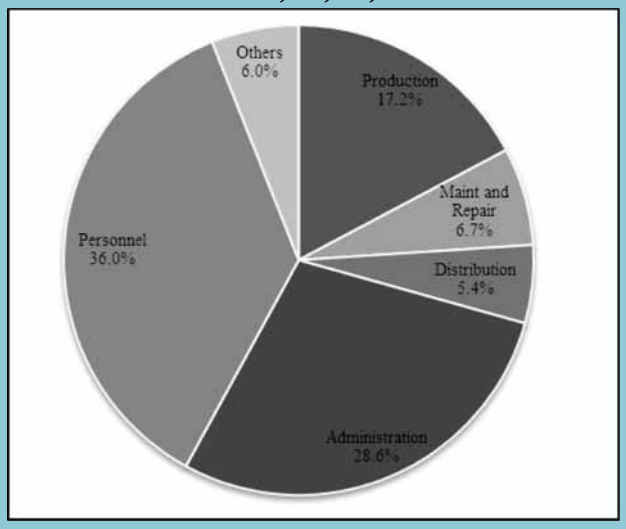
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 5,907,365,779
Government /Donor Grants	TZS -
Amortized Grants	TZS 392,827,427
Other income	TZS 465,931,521
TOTAL INCOME	**TZS 6,766,124,727**
Water Production Expenses	TZS 912,920,204
Water distribution expenses	TZS 284,391,326
Maintenance and Repair	TZS 356,064,434
Personnel Expenses	TZS 1,906,614,145
Administration Expenses	TZS 1,516,969,628
Other O&M Expenses	TZS 318,645,405
Total O&M expenses	**TZS 5,295,605,142**
Depreciation & Amortization	TZS 1,312,159,973
ANNUAL EXPENDITURE	**TZS 6,607,765,115**



ANNUAL WATER USE
7,705,199



ANNUAL WATER AND SEWERAGE BILLING
TZS 5,907,365,779



ANNUAL O&M COSTS
TZS 5,295,605,142

BARIADI URBAN WATER SUPPLY AND SANITATION AUTHORITY (BARIADI WSSA)

Water Utility

Bariadi WSSA was established as per Water Works Acto No. 8 of 1997 under GN No. 258 published on 21st June, 2002 as a partial autonomous Authority in Category C. Bariadi was upgraded to the level of Regional WSSA following establishment of the new Region of Simiyu whose headquarters are located in Bariadi town. The main objective of Bariadi WSSA is to provide water and sanitation services to the Bariadi town, whose population is estimated to be 53,935. Out of these, only 18,130 people are directly served by Bariadi WSSA, equivalent to 34%. Bariadi WSSA depends on six boreholes, with yield capacity ranging from 3 – 10 hours, for its water supply. Bariadi dam, which was formerly the main source of water supply, is no longer in use for lack of water after getting silted. The current installed capacity is not sufficient to cater for the town's water demand which is estimated to be 5,135 m^3/day. In 2012/13, Bariadi WSSA produced a total 142,074m^3 of water. Currently, Bariadi WSSA does not render sewerage services; these are for the moment handled by the Municipal Council. Bariadi WSSA has a total of 18 staff, 4 of whom are permanent employees.

General Data About Water Utility

Total water connections	421
Total active water connections	285
Total staff	18
Annual O&M costs	TZS 123,393,118
Annual water collection	TZS 31,432,629
Annual water billing	TZS 40,159,240

Tariff Structure

Category of customer	**Domestic**	**Institutions**	**Commercial**	**Kiosk**
Consumption charge (**TZS/m3**)	585	690	795	20/- per 20lts bucket
Flat rate charge (**TZS/Month**)	6,000	13,500	17,000	-
New Connection Charges **(TZS/connection)**	32,000	33,000	33,000	
Re-connection charges (TZS/connection)	10,500	16,000	21,000	
Service Charges (TZS/month)	2,000	2,000	2,000	
Meter Rental Charges (TZS/month)	500	500	500	

Priority of Needs

1. Low water production capacity, which calls for the need of exploring alternative water sources 2. Low metering ratio, thus being one of the reasons for high NRW, 3. Low water supply coverage, thus the need to extend water distribution network to uncovered areas.

Consumer Service

Average monthly consumption of water is about 31m^3 per connection, with per capita consumption of 16lts/day. Water is available at an average of 16 hours per day. Supplied water is in compliance with TBS water quality standards in both E-coli and turbidity. One pipe breaks/leaks per km per year was recorded during 2012/2013.

Performance Highlights

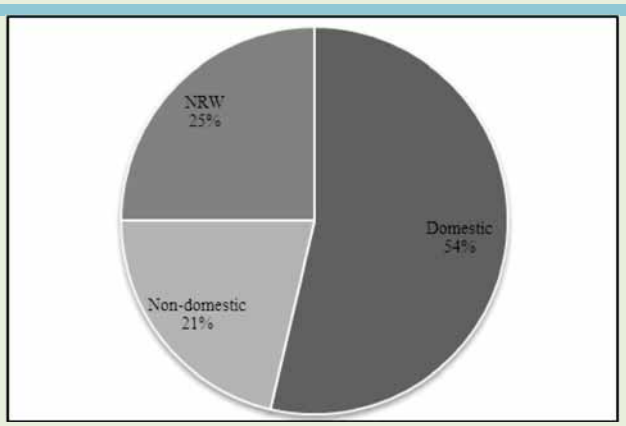
The proportion of population that is directly served by Bariadi WSSA is reported to be 33.6%. Non-Revenue Water is 25%. Metering ratio has increased to 12.4% from 11% reported in the previous year. The ratio of staff/1000 connections is high at 39.3. Operating ratio is 5.57. Average tariff is TZS 585 per m^3 which covers operating expenses, depreciation and part of investment expenditure. Account receivable is equivalent to 2 months.

BARIADI URBAN WATER SUPPLY AND SANITATION AUTHORITY (BARIADI WSSA)

Total Population in the Service Area: 53,935

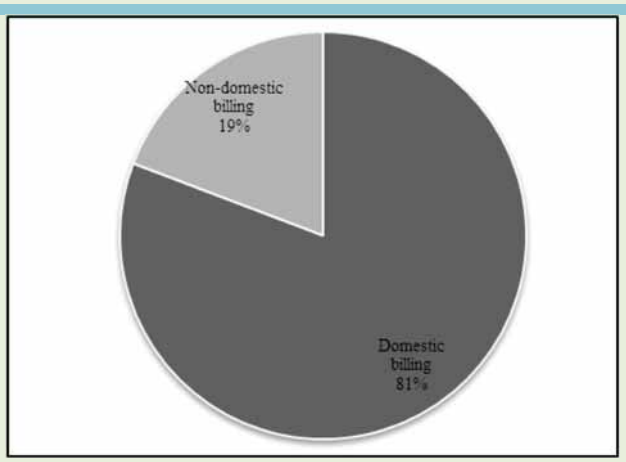
Production/Distribution	
Average daily production	389m^3
Production capacity/day	816m^3
Treatment type	Chlorination
Storage capacity	370m^3
Length of distribution network	24km

Service Connections	
Total water connections	458
Domestic water connections	421
Metering ratio %	12.4
Domestic metered connections	37



ANNUAL WATER USE
142,074 M^3

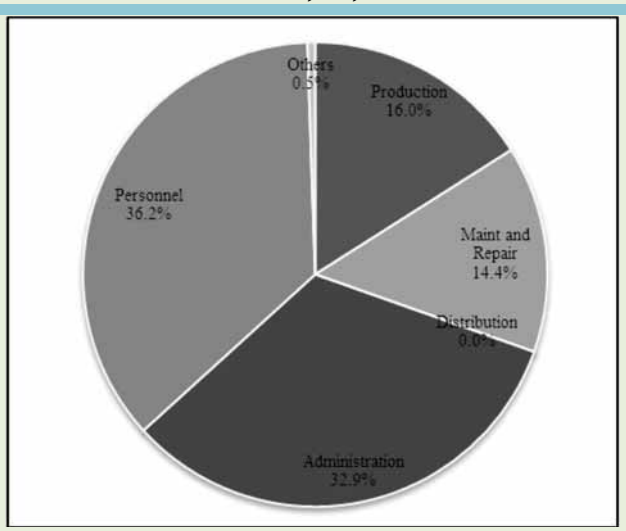
Service Indicators	
Water service coverage	33.6%
Average service hours	16
Per capita consumption	16 l/c/d
Average tariff	585 TZS/m^3



ANNUAL WATER BILLING
TZS 40,159,240

Efficiency Indicators	
Non-revenue water	25%
Unit production cost	TZS 139/m3
Operating ratio	5.57
Account receivable	2months
Staff/1000 connections	39.3

Income and expenditure	
Annual operating income from water and sewerage services	TZS 40,159,240
Government /Donor Grants	TZS 81,917,000
Amortized Grants	TZS -
Other income	TZS 4,359,700
TOTAL INCOME	**TZS 126,435,940**
Water Production Expenses	TZS 19,745,000
Water distribution expenses	TZS -
Maintenance and Repair	TZS 17,781,118
Personnel Expenses	TZS 44,675,000
Administration Expenses	TZS 40,537,000
Other O&M Expenses	TZS 655,000
Total O&M expenses	**TZS 123,393,118**
Depreciation & Amortization	TZS 124,777,341
ANNUAL EXPENDITURE	**TZS 248,170,459**



ANNUAL O&M COSTS
TZS 123,393,118

BUKOBA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (BUKOBA WSSA) **Profile**

Water Utility

Bukoba WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Bukoba Municipality. Its area of responsibility has a total population of 128,796 people, of which 98,260 people are living within the area with water supply network. The water supply network has a total length of 83km of pipelines. The utility draws water from 4 springs, one river intake and one intake at Lake Victoria. The combined production capacity is 13,280 m^3/day. Water production is 73.4% of water demand. The utility has no sewerage system. BUWASA has 62 permanent employees, 7 long-term and short-term contractual staff of different qualifications and professions.

General Data About Water Utility

Total water connections	7,533
Total waste water connections	NIL
Total Staff	67
Annual O&M costs	TZS 1,253,961,342
Annual collections	TZS 979,111,676
Annual water and sewerage sales	TZS 1,145,374,922

Tariff Structure

Category	Domestic	Institutions	Commercial	Industrial
Consumption Charge	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3
	705-730	785-850	730-795	790-860

Notes: The Charges at water kiosks are TZS 10/20 litre bucket

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	Meter Rent
TZS.	TZS.	TZS.	TZS.	TZS.
15,000-100,000	10,000-60,000	1,000	1,150-2,250	1,000-10,750

Priority of Needs

1. Reduction of Non-Revenue Water from 53.4% to acceptable level of 20% 2. Metering all its customers 3. Improvement of quality of water produced 4. Rehabilitation of water mains

Consumer Service

Average monthly consumption is about 12.7m^3 per domestic connection. Water is available at an average of 21.3 hours a day .Water quality is poor with only 59% of water samples taken during the year passing the E-coli tests. There were 1,529 consumer complaints recorded and 2.6 water pipe breaks per kilometre per year.

Performance Highlights

Bukoba WSSA provides water supply direct to 56.9% of the population in its service area. NRW is still high at 53.4%. All production points are metered. Operating ratio has deteriorated to 1.19 as compared to previous year. Accounts receivable equivalent is 3.4. Average tariff at TZS 759 per m^3 is fair and enough to cover operating expenses and part of investment. Staff/1000 connections ratio is fairly high for a category B utility at 8.9. Bukoba needs more effort to reduce account receivable to at least less than one month. Other areas for improvement are reduction of NRW, metering of all its customers, improvement of the quality of water produced and rehabilitation of water mains.

BUKOBA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (BUKOBA WSSA)

Total population in the service area: 128,796

Production/Distribution

Average daily production	8,029m^3
Production capacity/day	13,280m^3
Treatment type	Chlorination
Storage capacity	1,905m^3
Service area	80km^2
Distribution pipe network	83km

Service Connections

Total water connections	7,533
Domestic water connections	6,887
Total sewer connections	NIL
Domestic sewer connections	NIL

Service Indicators

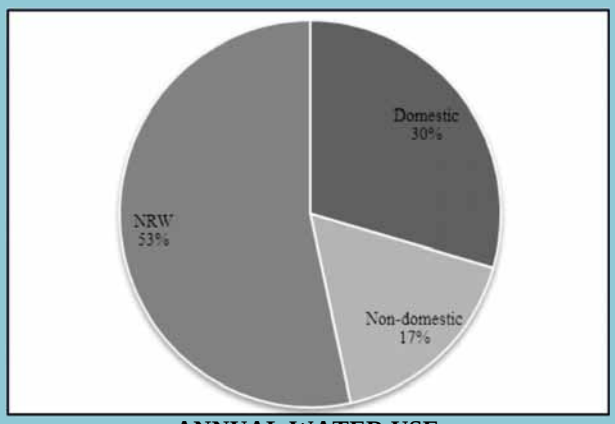
Water Service Coverage	56.9%
Service hours	21.3hrs
Per capita consumption	47l/c/d
Average tariff	TZS 759/m^3

Efficiency Indicators

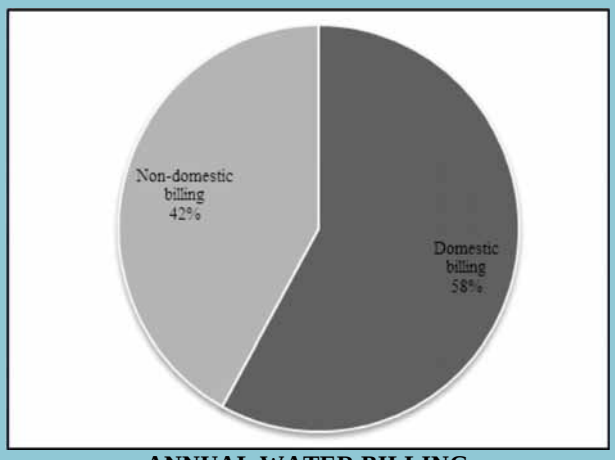
Non-Revenue Water	53.4%
Unit production cost	TZS 427.90/m^3
Operating ratio	1.19
Account receivables	3.4
Staff/1000 connections	8.9

Income and Expenditure

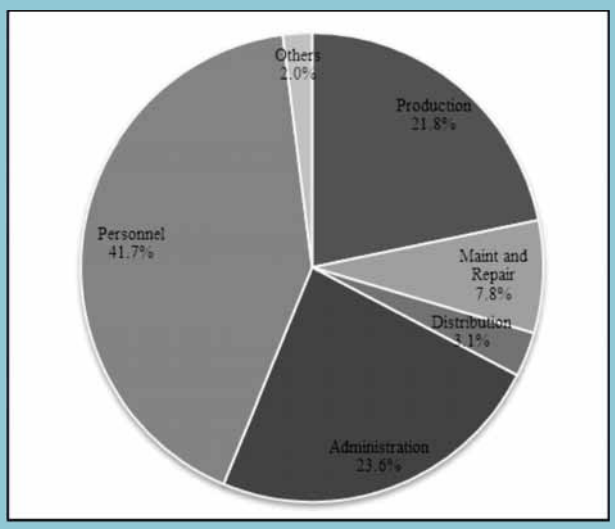
Annual operating income from water and sewerage services	TZS 1,145,374,922
Government /Donor Grants	TZS 0
Amortized Grants	TZS 105,359,770
Other income	TZS 106,250,640
TOTAL INCOME	**TZS 1,356,985,332**
Water Production Expenses	TZS 272,851,401
Water distribution expenses	TZS 38,921,146
Maintenance and Repair	TZS 97,533,389
Personnel Expenses	TZS 522,966,780
Administration Expenses	TZS 296,170,270
Other O&M Expenses	TZS 25,518,356
Total O&M expenses	**TZS 1,253,961,342**
Depreciation & Amortization	TZS 232,453,572
ANNUAL EXPENDITURE	**TZS 1,486,414,914**



ANNUAL WATER USE
2,930,736 m^3



ANNUAL WATER BILLING
TZS 1,145,374,922



ANNUAL O&M COSTSTZS
1,253,961,342

KIGOMA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (KIGOMA WSSA) **Profile**

Water Utility

Kigoma WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services in the Kigoma Municipality. Its area of responsibility has a total population of 224,162 people, of which 152,430 people are living within the area with water supply network. The water supply network has a total length of 215.7km of pipelines. The utility draws water from the Lake Tanganyika intake. The intake has a production capacity of 15,000m^3/day. Water production is 59.4% of water demand. The Utility has no sewerage system. KUWASA has 68 employees, 11 permanent and 57 long-term and short-term contractual staff of different qualifications and professions.

General Data About Water Utility

Total water connections	8,664
Total waste water connections	NIL
Total staff	68
Annual O&M costs	TZS 2,152,615,414
Annual collections	TZS 1,175,083,622
Annual billings& sewerage sales	TZS 1,738,571,351

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial
Consumption Charge	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3
	715	1,065	1,110	1,155

Notes: The Charges at water kiosks are TZS 500/m^3.

Flat rates charges

Category	Domestic	Institutional	Commercial	Industrial
Consumption Charge	TZS/month	TZS/month	TZS/month	TZS/month
	18,000	N/A	N/A	N/A

New connection (water)	Reconnection	Service charge	Meter Rent
TZS.	TZS.	TZS.	TZS.
20% of Connection Charge	10,000-20,000	1,500-3,300	500

Priority of Needs

1. Reduction of NRW 2. Improvement on production and service hours 3. Metering all its customers 4. Construction of water treatment plant and sewerage system 5. Increased water services coverage 6. Improved revenue collection

Consumer Service

Average monthly consumption is about 23.8m^3 per domestic connection. Water is available at an average of only 9.1 hours a day .Water quality is good, with 100% of water samples taken during the year passing the E-coli tests. There were 679 consumer complaints recorded and 2.8 water pipe breaks per kilometre per year.

Performance Highlights

KUWASA provides water supply direct to 42.8% of the population in its service area. NRW is still high at 33.5%. Operating ratio is at 1.23. Accounts receivable equivalent is 3.1 months. Average tariff at TZS 772 per m^3 to cover operating expenses and part of investment. Staff/1000 connections ratio is 8.

KIGOMA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (KIGOMA WSSA)

Total Population: 224,162

Production/Distribution

Average daily production	12,034m^3
Production capacity/day	15,000m^3
Treatment type	Chlorination
Storage capacity	4,220m^3
Service area	30km^2
Distribution pipe network	215.7km

Service Connections

Total water connections	8,664
Domestic water connections	8,349
Total Sewer connections	NIL

Service Indicators

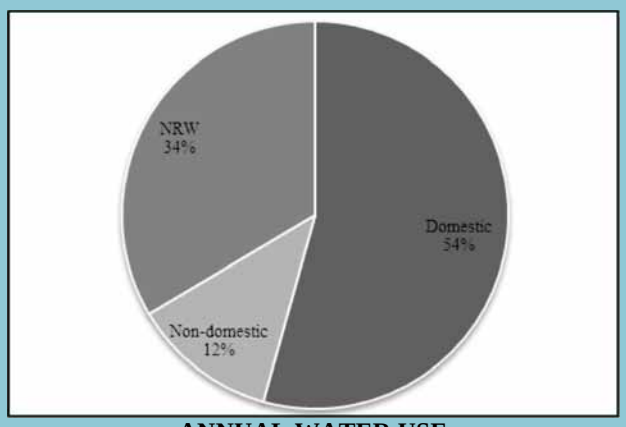
Water service coverage	42.8%
Service hours	9.1hrs
Per capita consumption	44.1l/c/d
Average tariff	TZS 772/m^3

Efficiency Indicators

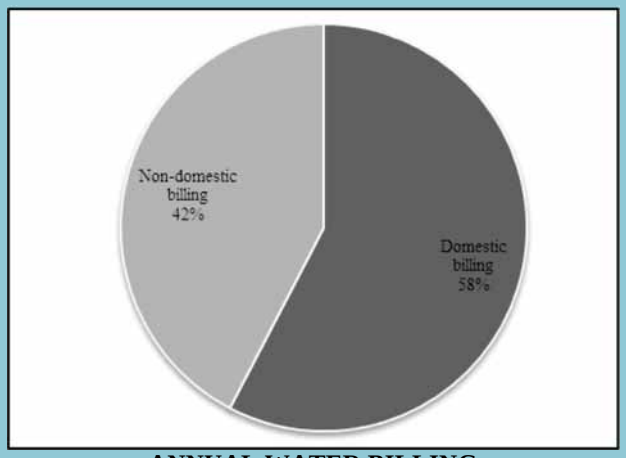
Non-Revenue Water	33.5%
Unit production cost	TZS 489.70/m^3
Operating ratio	1.23
Account receivable s	3.1
Staff/1000 connections	8

Income and Expenditure

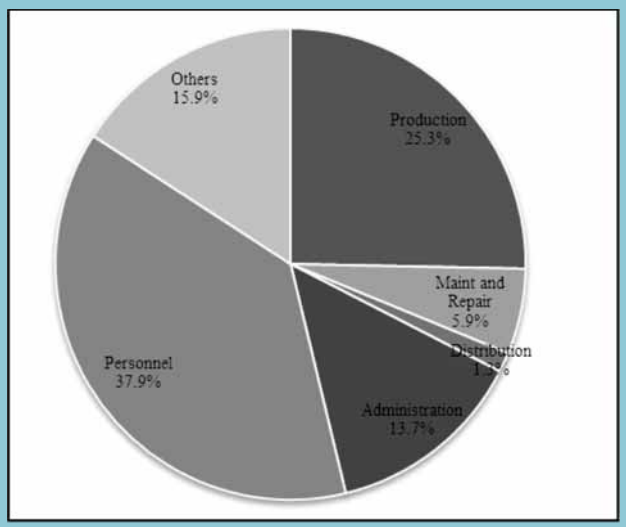
Annual operating income from water and sewerage services	TZS 1,738,571,351
Government /Donor Grants	TZS 10,000,000
Amortized Grants	TZS 7,529,580
Other income	TZS 102,257,653
TOTAL INCOME	**TZS 1,858,358,584**
Water Production Expenses	TZS 545,024,778
Water distribution expenses	TZS 28,932,342
Maintenance and Repair	TZS 126,264,775
Personnel Expenses	TZS 816,097,037
Administration Expenses	TZS 294,880,397
Other O&M Expenses	TZS 341,416,084
Total O&M expenses	**TZS 2,152,615,414**
Depreciation & Amortization	TZS 106,293,757
ANNUAL EXPENDITURE	**TZS 2,258,909,171**



ANNUAL WATER USE
4,395,488m^3



ANNUAL WATER BILLING
TZS 1,738,571,350.90



ANNUAL O&M COSTS
TZS 2,152,615,414

SINGIDA URBAN WATER SUPPLY AND SANITATION AUTHORITY (SINGIDA WSSA)

Water Utility

Singida WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sewerage services in the Singida Municipality. Currently, Singida WSSA's service area has a total population of 87,248 (as reported in the 2012 Census Report). Water supply in Singida town is purely from underground sources. There are 23 boreholes in 9 well fields with water production capacity of 9,088m^3 a day, sharply increasing from 4,300 m^3/day reported in the last year. This rapid increase in production capacity is caused by starting utilization of Mwankoko borehole, which is one of the completed boreholes implemented under the ongoing water project funded by BADEA/OPEC and WSDP. The project has been delayed, it is now expected to be completed in August, 2013. During the year 2012/2013, Singida WSSA produced a total of 1,430,781m^3 of water (an average of 3,920 m^3/day), increasing by 4% compared to the previous year's production. The current water demand in Singida WSSA's service area is estimated at 7,200 m^3/day decreasing from 7,550 m^3/day reported last year. This year's estimation is based on the actual population figures extracted from the census report. There is no sewerage services in Singida WSSA's service area, but plans are underway to implement the sewerage project, whereby currently Singida WSSA is in the process of procuring a design Consultant for construction of the sewerage network and the sewerage treatment plant.

General Data About Water Utility

Total water connections	5,399
Total active water connections	5003
Total staff	69
Annual O&M costs:	TZS 941,304,412
Annual water collection:	TZS 727,242,561
Annual water billing:	TZS 792,488,632

Tariff Structure

	WATER TARIFF AND CHARGES					
Category	**Domestic**	**Institutions**	**Commercial**	**Religious**	**Water Tankers**	**Kiosks**
Metered (TZS./m^3)	550 - 650	700 – 750	650 - 700	650 - 700	1,500	1,000
Flat rate (TZS.)	8,000	15,000	15,000	12,000	-	-
Connection charge	50,000	80,000	80,000	-	-	-
Meter Rent	1,000	2,500	2,500	-	-	-

Priority of Needs

1. Increase water production. 2. Meter all active customers. 3. Extension of the distribution network to uncovered area. 4. Construction of sewerage collection network and treatment facilities.

Consumer Service

Average daily consumption of water is about 549 litres per connection, with per capita consumption of 38.7lts/day. Water is available at an average of 5.7 hours per day. Supplied water is in compliance with WHO water quality standards in both E-coli and turbidity. 3.5 pipe breaks/leaks per km per year was recorded during 2012/2013.

Performance Highlights

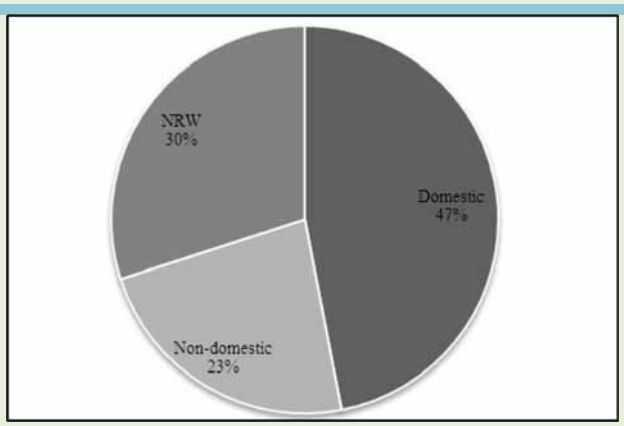
The proportion of population that is directly served by Singida WSSA has increased from 76.5% reported in the previous year to 81.2% this year. Non-Revenue Water has remained at 30% as last year. Metering ratio has increase to 81.6% from 73% reported in the previous year. The ratio of staff/1000 connections has improved from 13.2 reported last year to 12.8. Operating ratio is 1.4. Average tariff is TZS 796 per m^3 which covers operating expenses, depreciation and part of investment expenditure. Account receivable is equivalent to 3.3 months..

SINGIDA URBAN WATER SUPPLY AND SANITATION AUTHORITY (SINGIDA WSSA)

Total Population in the Service Area: 87,248

Production/Distribution	
Average daily production	3,920m^3
Production capacity/day	9,088m^3
Treatment type	Chlorination
Storage capacity	7,022m^3
Length of distribution network	95.5km

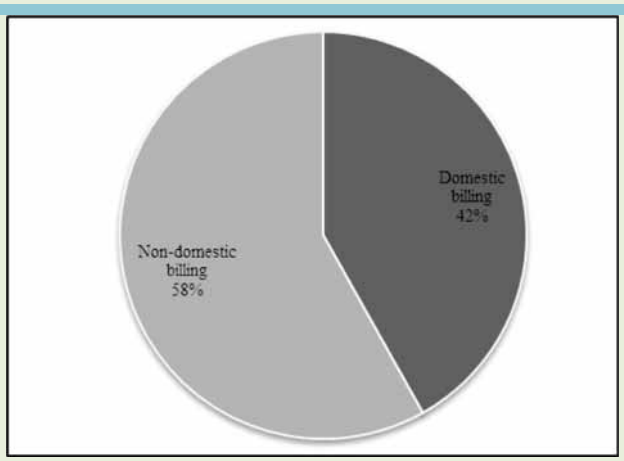
Service Connections	
Total water connections	5,399
Domestic water connections	4,789
Metering ratio %	81.6
Domestic metered connections	4,013



ANNUAL WATER USE
1,430,781 M^3

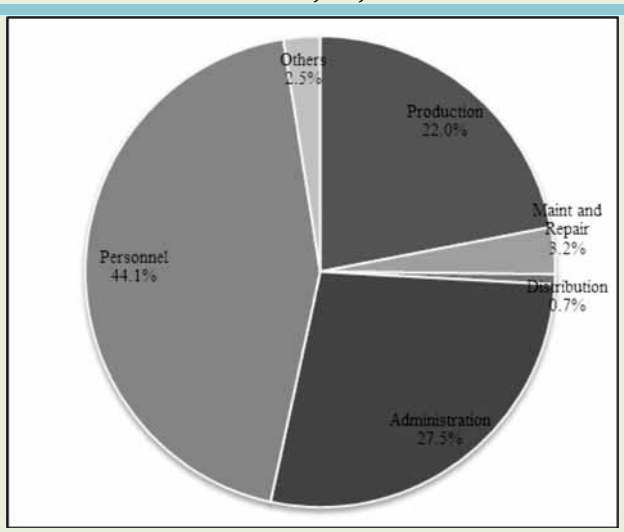
Service Indicators	
Water service coverage	81.2%
Average service hours	5.7
Per capita consumption	38.7 l/c/d
Average tariff	TZS/m^3 796

Efficiency Indicators	
Non-revenue water	30%
Unit production cost	TZS 144.5 /m^3
Operating ratio	1.4
Account receivable	3.3 months
Staff/1000 connections	12.8



ANNUAL WATER BILLING
TZS 792,488,632

Income and expenditure	
Annual operating income from water and sewerage services	TZS 792,488,632
Government /Donor Grants	TZS -
Amortized Grants	TZS 81,655,572
Other income	TZS 12,710,000
TOTAL INCOME	**TZS 886,854,204**
Water Production Expenses	TZS 206,738,033
Water distribution expenses	TZS 6,553,200
Maintenance and Repair	TZS 30,246,470
Personnel Expenses	TZS 415,029,577
Administration Expenses	TZS 259,066,559
Other O&M Expenses	TZS 23,670,573
Total O&M expenses	**TZS 941,304,412**
Depreciation & Amortization	TZS 184,794,019
ANNUAL EXPENDITURE	**TZS 1,126,098,431**



ANNUAL O&M COSTS
TZS 941,304,412.00

SUMBAWANGA WATER SUPPLY AND SANITATION AUTHORITY (SUMBAWANGA WSSA)

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 209,793. Proportion of Population Living in the area with water network is 36.7%. The utility draws water from surface (River – 99.2%) and groundwater sources (boreholes – 0.8%) and has a semi conventional treatment plant. The utility has no sewerage system.

General Data About Water Utility

Total water connections	5,496
Total active water connections	5,302
Total staff	42
Annual O&M costs	TZS 709,527,740
Annual Water Collections	TZS 593,095,727
Annual Water Billing	TZS 515,971,532

Tariff Structure

WATER TARIFF					
Category	Domestic	Institutional	Commercial	Industrial	Kiosks
TZS./m3	410-550	510-690	510-640	590-740	500
Flat rate (TZS.)	5,000	-	-	-	TZS 10/20ltrs

OTHER CHARGES				
New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)	Fixed Charge for Sewer New connection
TZS.	TZS.	TZS.	TZS.	TZS.
20,000	10,000 – 20,000	1,000	1,500 – 3,000	-

Priority of Needs

1. Rehabilitation and extension of the water supply and sewerage infrastructures. 2. Reduction of NRW 3.Promotion of connections to customers. 4. Planning for and construction of sewerage infrastructure for the Sumbawanga Municipality. 5. Compliance with water quality standards.

Consumer Service

Average monthly domestic water consumption is about 7.3 m3 per connection, with per capita consumption of 57lts/day. Water is available at an average 10.6 hours per day. Water quality compliance with WHO set standards is fair with 83% compliance. There were 1.1 pipe breaks per km per year recorded.

Performance Highlights

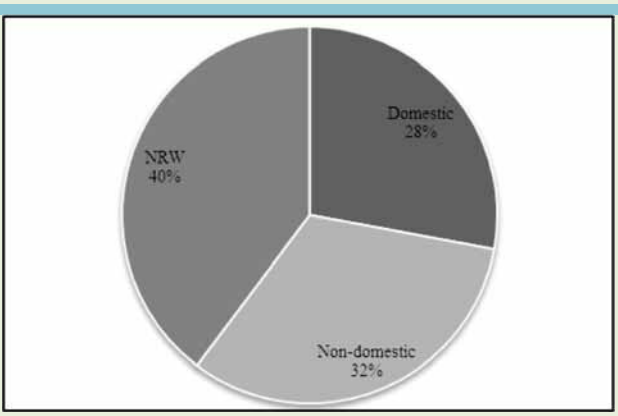
Sumbawanga WSSA provides direct water supply to 26% of the population living in the area with water network. NRW is still high at 39.7%. A fair portion of customers are metered and, currently, metering ratio is 75.2%. Operating ratio is 1.42 and Accounts receivable equivalent is 3.4 months. Average tariff stands at TZS 508 per m^3 which is inadequate for covering operating expenses and network extensions. Ratio of Staff per 1000 water connections ratio is 8.6.

SUMBAWANGA WATER SUPPLY AND SANITATION AUTHORITY (SUMBAWANGA WSSA)

Total Population in the Service Area: 209,793.

Production/Distribution	
Average daily production	4,461m^3
Production capacity/day	7,200m^3
Treatment type	Partial Conventional
Storage capacity	1,350m^3
Length of distribution network	133km

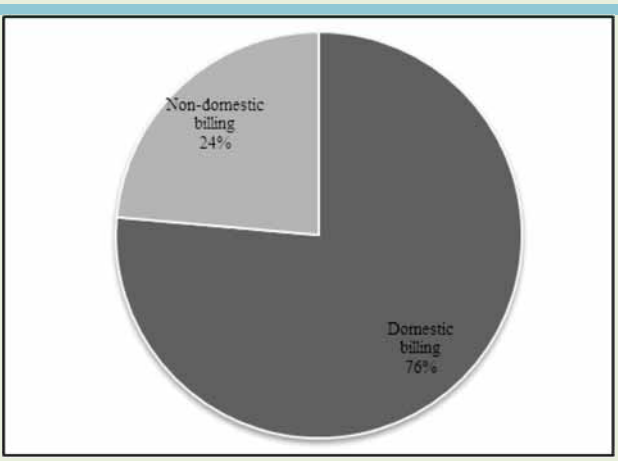
Service Connections	
Total water connections	5,496
Domestic water connections	5,206
Total sewer connections	-
Domestic sewer connections	-
Metering ratio	72.6%



ANNUAL WATER USE
1,628,595 m^3

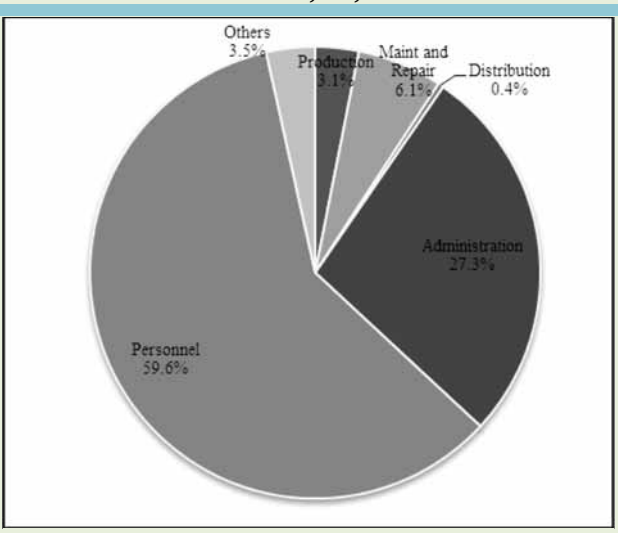
Service Indicators	
Water service coverage	61.6%
Average service hours	10
Per capita consumption	57l/c/d
Average tariff	TZS 508/m^3

Efficiency Indicators	
Non-Revenue Water	39.7%
Unit production cost	TZS 425/m^3
Collection efficiency	92%
Operating ratio	1.4
Account receivable	3.4months
Staff/1000 connections	8.6



ANNUAL WATER SERVICES BILLING
TZS 576,656,532

Income and Expenditure	
Annual operating income from water and sewerage services	TZS 576,656,532
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 27,608,637
TOTAL INCOME	**TZS 604,265,169**
Water Production Expenses	TZS 22,112,000
Water distribution expenses	TZS 2,736,471
Maintenance and Repair	TZS 43,366,565
Personnel Expenses	TZS 422,914,103
Administration Expenses	TZS 193,587,304
Other O&M Expenses	TZS 24,811,298
Total O&M expenses	**TZS 709,527,741**
Depreciation & Amortization	TZS 151,212,597
ANNUAL EXPENDITURE	**TZS 860,740,338**



ANNUAL O&M COSTS
TZS 709,527,741

BABATI URBAN WATER SUPPLY AND SANITATION AUTHORITY (BABATI WSSA) **Profile**

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 91,436 people. The operational area of the utility has a population density of 3,104 persons/km^2. The utility draws water from one spring source (Mrara Spring) contributing about 30% of the daily water production and eleven boreholes contributing about 70%. The combined source production capacity is 9000m^3/day. The Utility has no sewerage system.

General Data About Water Utility

Total Water Connections	3728
Total Staff	48
Annual O&M Costs	TZS 617,076,809
Annual Water Sales Collections	TZS 603,755,163
Annual Water Sales Billings	TZS 615,238,780

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial	Kiosks
Consumption	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**	**TZS/m^3**
> 5	500	645	715	1030	320
5 - 10	600	795	950		
< 10	645	870	1030		

Service Charge: **TZS 2500/month**

Priority of Needs

1. Extensions of water supply network 2. Reduction of Non-Revenue Water; 3. Initiation of wastewater collection system 4. Environmental protection of water sources catchment areas 5. Increase the existing storage capacity.

Consumer Service

Average monthly consumption is about 12m^3 per domestic connection with a per capita consumption improved from 25lts/day during last year to 32 lts/day this year. Water is available at an average of 14 hours a day. The quality of water meets the required standard in which the overall average compliance during the year was 99.77%. There were 2,330 consumer complaints recorded out of which 2125 of the complaints were resolved.

Performance Highlights

Babati WSSA provides water supply direct to 63.37% of the population in its service area while the community schemes within the licenced areas serves 20.83% making overall water service coverage of 84.2%. The service coverage considers the entire Babati Township boundary comprising of 8 wards. The NRW is still high but improved to 37.05% compared to 39.7 recorded last year. All productions points are metered as well as all customer connections. Operating ratio is 1.4 which is still not satisfactory. Accounts receivable equivalent is good at 1.4 month. Average tariff at TZS 724 per m^3 is fair although not sufficient to cover all operating expenses and part of investment. Staff/1000 connections ratio is still high at 12.88.

BABATI WATER SUPPLY AND SANITATION AUTHORITY (BABATI WSSA)

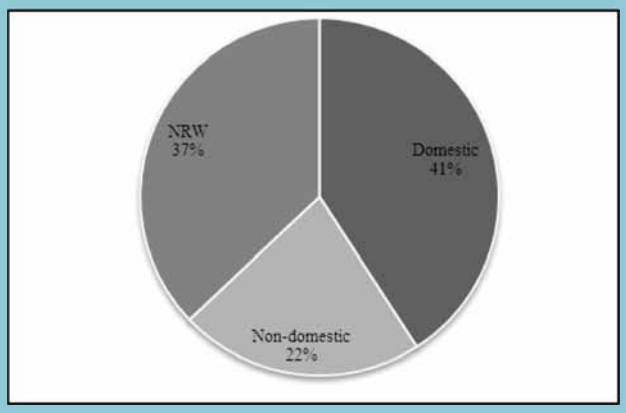
Total Population in the Service Area: 91,436

Production/Distribution	
Average a daily production	3,208m^3
Production capacity/day	9,000m^3
Treatment type	Convention partial
Storage capacity	1,125m^3
Service area	30km^2
Distribution pipe network	127.93km

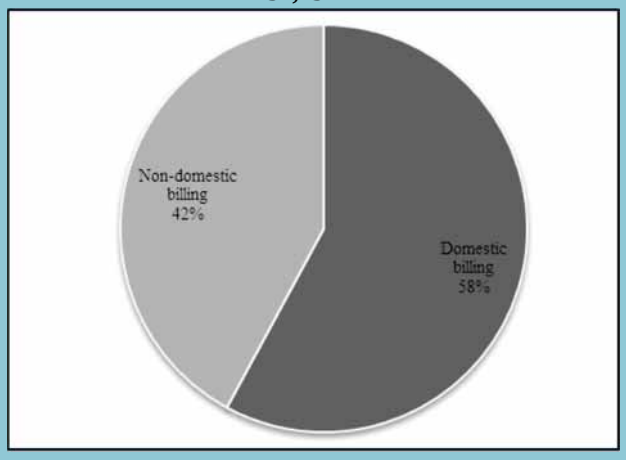
Service Connections	
Total water connections	3,728
Domestic water connections	3,349
Total active connections	3,519
Metered connections	100%

Service Indicators	
Water service coverage	84.2%
Service hours	14hrs
Per capita consumption	32l/c/d
Average tariff	724TZS/m3
Complaints/1000 connections	625
Efficiency Indicators	
Non-Revenue Water	37.05%
Revenue collection efficiency	84%
Unit production cost	820TZS/m3
Operating ratio	1.4
Working ratio	0.90
Account receivable	1.4
Staff/1000 connections	12.88

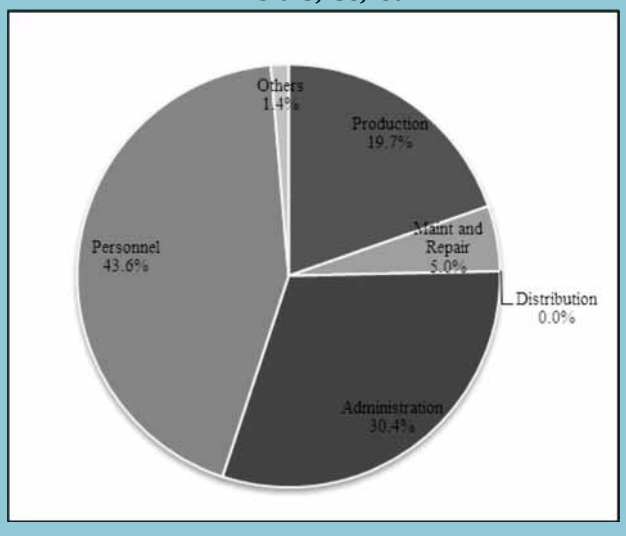
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 615,238,780
Government /Donor Grants	TZS -
Amortized Grants	TZS 226,632,551
Other income	TZS 71,132,690
TOTAL INCOME	**TZS 913,004,021**
Water Production Expenses	TZS 121,290,983
Water distribution expenses	TZS -
Maintenance and Repair	TZS 30,853,386
Personnel Expenses	TZS 268,856,279
Administration Expenses	TZS 187,708,031
Other O&M Expenses	TZS 8,368,130
Total O&M expenses	**TZS 617,076,809**
Depreciation & Amortization	TZS 343,233,791
ANNUAL EXPENDITURE	**TZS 960,310,600**



ANNUAL WATER USE
737,137 m^3



ANNUAL WATER BILLING
TZS 615,238,780



ANNUAL O&M COSTS
TZS 617,076,809

LINDI URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (LINDI WSSA) **Profile**

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. Its area of operation has a total population of 78,841 people. Population living in area with network is 55,427 people .The current percentage population coverage is 70.30%. The utility draws water from surface and groundwater sources. The total new municipal area is approximately 830km^2. The utility has neither a sewerage system nor a sewage treatment plant.

General Data About Water Utility

Total water connections	1,706
Total waste water connections	-
Total staff	42
Annual O&M costs	TZS 682,301,766
Annual water and sewerage collections	TZS 261,324,373
Annual water and sewerage billing	TZS 219,254,460

Tariff Structure

WATER TARIFF

Category	Domestic	Institutional	Commercial	Industrial	Kiosks	Bowser
TZS./m^3	900	1,100	1,400	1,600	1,000	2,300
Flat rate (TZS.)	9,000	19,000	32,000	42,000	-	-

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-Domestic)
TZS	TZS	TZS	TZS
30,000 – 50,000	10,000 – 40,000	2,500	2,500-3,400

Priority of Needs

Based on its business plan 2011 - 2014, LUWASA has set up priority areas to be: 1. Access to adequate water supply increased by establishing new water sources, extension of pipe network, increase in number of connections and reducing NRW 2. Improve on quality of water supply by Conservation of area around the sources and improve on treatment facilities 3. Improve sanitation services by Acquiring land for sewage treatment plants and sensitization of community on the use of proper sanitation facilities 4. Institution Capacity Strengthened by improving working environment, Improve equipment and transport facilities, recruitment of competent staff and contract out non-core functions of the authority 5. Reduce HIV and AIDS infections by having in place a programme to fight spread of HIV/AIDS in work places, Promote voluntary counseling and testing for the Lindi WSSA staff and provide care and support to Lindi WSSA staff living with HIV/AIDS.

Consumer Service

Average monthly consumption is about 5.8m^3 per connection, with per capita consumption of 3.5lts/day. Water is available at an average of 6 hours per day. Water quality compliance with WHO set standards with E-coli is 99 and turbidity is having 100% compliance There were 6 pipe breaks per km per year.

Performance Highlights

Lindi WSSA provides water supply direct to 48% of the population in its service area. NRW is still high at 47.2%. The metering ratio is 67%. Operating ratio is also high at 1.89. Accounts receivable equivalent is 3.4months. Average tariff stands at TZS. 900 per m^3 which does not cover operating expenses. The ratio of staff per 1000 total connections ratio is 24.6

LINDI URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (LINDI WSSA)

Total Population in the Service Area: 78,841

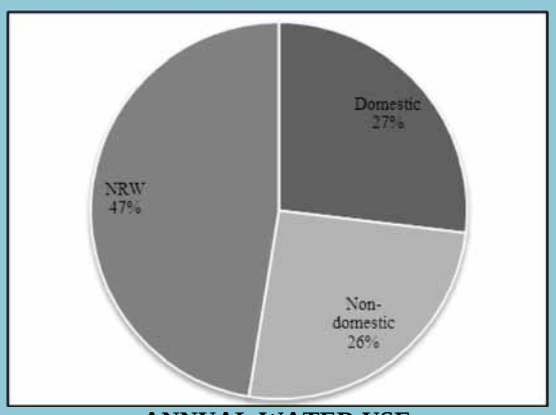
Production/Distribution	
Average daily production	1,039 m3
Production capacity/day	4,050 0m3
Treatment type	Chlorination
Storage capacity	3,070m^3
Length of distribution network	129 km

Service Connections	
Total water connections	1,706
Domestic water connections	1,478
Total sewer connections	-
Domestic sewer connections	-
Metering ratio	67%

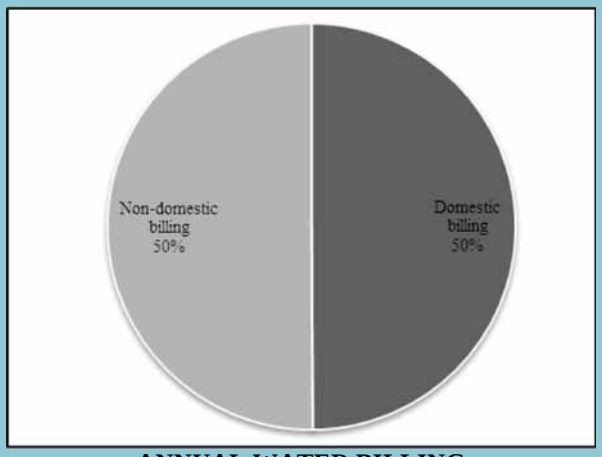
Service Indicators	
Water service coverage	70%
Average service hours	6
Per capita consumption	3.5lts/c/d
Average tariff	TZS/m^3 900

Efficiency Indicators	
Non-revenue water	47.4%.
Unit production costs	TZS 2,065.6 /m^3
Operating ratio	1.89
Account receivable	3.4 months
Staff/1000 connections	34

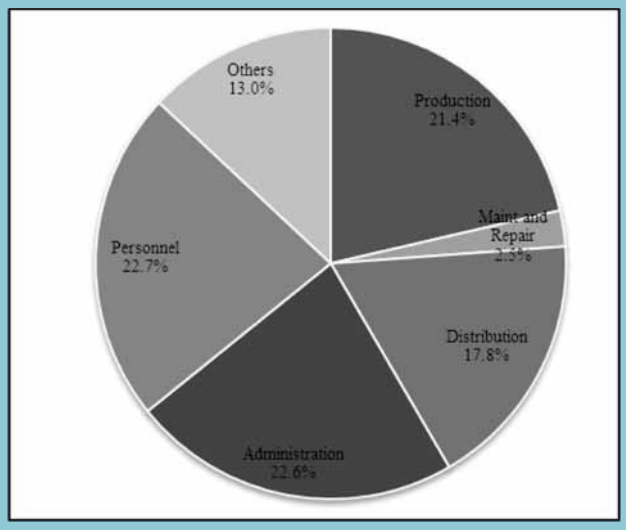
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 219,254,460
Government /Donor Grants	TZS -
Amortized Grants	TZS 62,874,970
Other income	TZS 194,895,578
TOTAL INCOME	**TZS 477,025,008**
Water Production Expenses	TZS 145,930,972
Water distribution expenses	TZS 121,198,050
Maintenance and Repair	TZS 16,763,257
Personnel Expenses	TZS 155,151,184
Administration Expenses	TZS 154,282,380
Other O&M Expenses	TZS 88,975,923
Total O&M expenses	**TZS 682,301,766**
Depreciation & Amortization	TZS 101,038,251
ANNUAL EXPENDITURE	**TZS 783,340,017**



ANNUAL WATER USE
379,238m^3



ANNUAL WATER BILLING
TZS 219,254,460



ANNUAL O&M COSTS
TZS 682,301,766

GEITA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (GEITA WSSA) **Profile**

Water Utility

Geita WSSA is a fully autonomous public water utility responsible for the overall operation and management of water supply and sanitation services within Geita Urban area which is the headquarter of newly established Geita Region. Geita WSSA is classified as Category C water authority. Its area of responsibility has a total population of 192,707 people in which 12,696 people are currently served. The utility draws water from four water sources, namely Kagera Spring, Kambarage, Bomani and Tambukareli boreholes. The sources have altogether, total installed production capacity of 590m^3/day .The present production capacity is insufficient compared with the estimated water demand of 14,146m^3/day. The total length of pipeline system is 16km. Water is supplied through rationing at an average of 4hrs. The system has 6 storage tanks with a combined capacity of 370m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under Geita District Town Council. GEUWASA has 4 permanent employees, 4 contracted staff and 4 daily paid labourers of different qualifications and professions.

General Data About Water Utility

Total water connections	391
Total waste water connections	N/A
Total staff	12
Annual O&M costs	TZS 79,375,338
Annual collections	TZS 50,533,526
Annual billings& sewerage sales	TZS 41,978,245

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial
Consumption Charge	TZS/m^3	TZS/m^3	TZS/m^3	TZS/m^3
	300	335	390	N/A

Flat Rate Customers

Category	Domestic	Institutional	Commercial	Industrial
Consumption Charge	TZS/month	TZS/month	TZS/month	TZS/month
	10,500	11,500	11,500	N/A

Notes: The Charges at water Kiosks are TZS 1,000 /m^3.

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)
TZS.	TZS.	TZS.	TZS.
15,000-120,000	5,500	NIL	NIL

Priority of Needs

1. Reduction of non revenue water. 2. Improve water and sewerage coverage%. 3. Recovery of arrears 4. Improve water production

Consumer Service

Average monthly consumption is about 18.5m^3 per domestic connection. Water is available at an average of 4 hours a day .Water quality is poor, with only chlorination done to the abstracted water. There were 23 water pipe breaks per year recorded.

Performance Highlights

GEUWASA provides water supply direct to a small fraction of 2% of the population in its service area. NRW is reasonably good at 24%. Operating ratio is at 1.12. Accounts receivable equivalent is 1.3months. Average tariff is TZS 300 per m^3 which is fair to cover operating expenses and part of investment. Staff/1000 connections ratio is poor at 30.7.

GEITA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (GEITA WSSA)

Total Population in the Service Area: 192,707

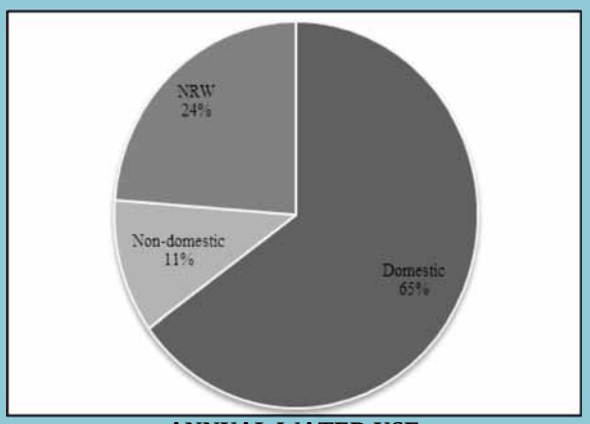
Production/Distribution	
Average daily production	512m^3
Production capacity/day	590m^3
Treatment type	Chlorination
Storage capacity	370m^3
Service area	1,080km^2
Length of distribution network	16.2km

Service Connections	
Total water connections	391
Domestic water connections	343
Total sewer connections	N/A
Domestic sewer connections	N/A
Metered connections	13

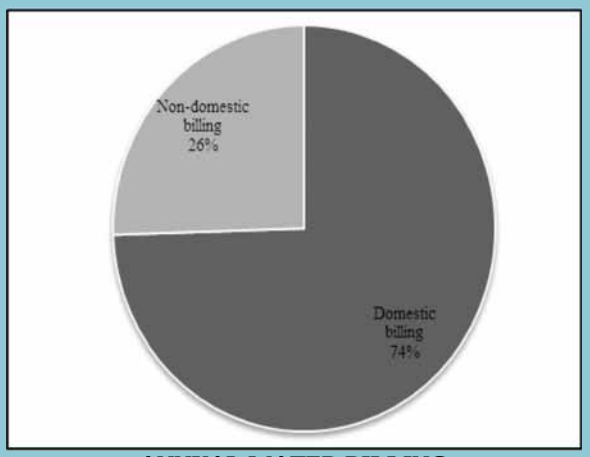
Service Indicators	
Water service coverage	2%
Average service hours	4
Per capita consumption	61.7l/c/d
Average tariff	300 TZS/m^3

Efficiency Indicators	
Non-Revenue Water	24%
Unit production cost	673.40TZS/m^3
Operating ratio	1.12
Account receivable	1.3months
Staff/1000 connections	30.7

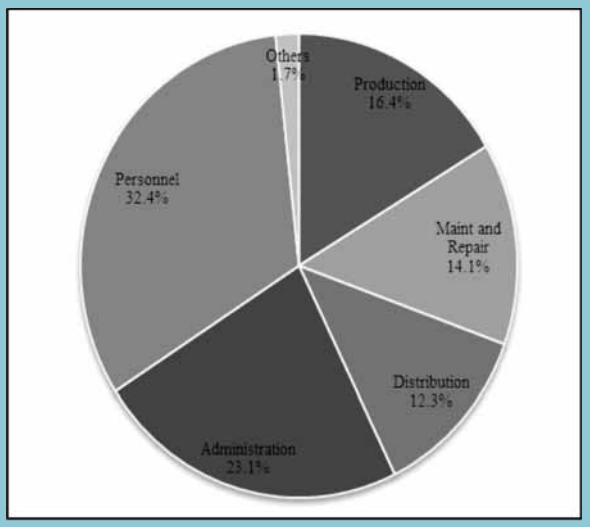
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 41,978,245
Government /Donor Grants	TZS -
Amortized Grants	TZS 9,944,500
Other income	TZS 37,894,353
TOTAL INCOME	**TZS 89,817,098**
Water Production Expenses	TZS 13,004,778
Water distribution expenses	TZS 9,737,600
Maintenance and Repair	TZS 11,214,600
Personnel Expenses	TZS 25,695,900
Administration Expenses	TZS 18,355,500
Other O&M Expenses	TZS 1,366,960
Total O&M expenses	**TZS 79,375,338**
Depreciation & Amortization	TZS 9,944,500
ANNUAL EXPENDITURE	**TZS 89,319,838**



ANNUAL WATER USE
117,875 m^3



ANNUAL WATER BILLING
TZS 41,978,245



ANNUAL O&M COSTS
TZS 79,375,338.43

MPANDA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MPANDA WSSA)

Water Utility

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 102,283 people while the currently served area of the utility has a population of 53,498. Proportion of Population Living in the area with water network is 52.3%. The Utility draws water from surface (River – 25% and dam 66%) and groundwater sources (9%). The utility has no sewerage system.

General Data About Water Utility

Total water connections	2,903
Total waste water connections	-
Total staff	37
Annual O&M costs	TZS 151,521,000
Annual water collections	TZS 163,475,300
Annual water billing	TZS 176,617,000

Tariff Structure

Category of customer	Domestic	Institutions	Commercial	Industrial	Kiosks
Metered (**TZS/M^3**)	445	550	510	670	30 per 20 litre jerry
Flat rate (**TZS/Month**)	5,500	11,500	9,500	50,000	

OTHER CHARGES

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)		
TZS.	**TZS.**	**TZS.**	**TZS.**	**TZS.**	**TZS.**

Priority of Needs

Mpanda WSSA has plans that can be implemented to improve water service in Mpanda township categorized according to their magnitude and capital investment. The Immediate plan (2013-2014) for up-grading water system includes: 1. Abstraction of water from Ikorongo spring will add 5000m^3/day to the reticulation system 2. Installation of surface Pump at Milala with Q = 150m^3/h 3. Construction of reservoir tank at Kazima with a capacity of 1000m^3 4. Rehabilitation and extension distribution network 39km and 5. Installation of 4,000 water meters.

Consumer Service

Average monthly consumption is about 19.1m^3 per connection, with per capita consumption of 122lts/day. Water is available at an average of 3hours per day. There were 0.8 pipe breaks per km per year recorded during the year.

Performance Highlights

Mpanda WSSA provides direct water supply to 41.8% of the population living in the area with water network. NRW is still, very high and currently stands at 49%. A large portion of customers are not metered and, currently, metering ratio is 13.5%. Operating ratio is 1.08 and Accounts receivable equivalent is 3.8 months. Average tariff stands at TZS 445 per m^3 which is inadequate for covering operating expenses and network extensions. Ratio of Staff per 1000 water connections ratio is 12.7.

MPANDA URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (MPANDA WSSA)

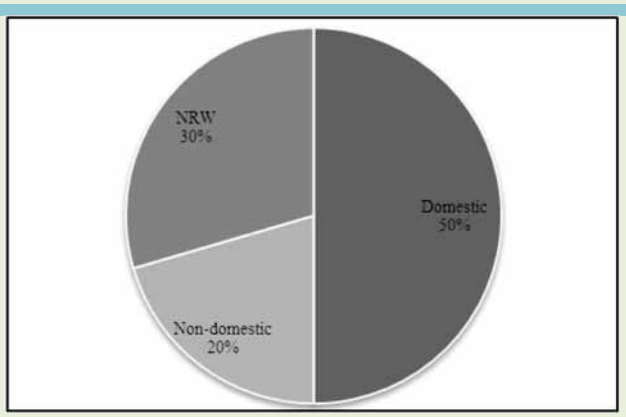
Total Population in the Service Area: 102,283

Production/Distribution

Average daily production	3,300m^3
Production capacity/day	4,740m^3
Treatment type	none
Storage capacity	530.m^3
Length of distribution network	74km

Service Connections

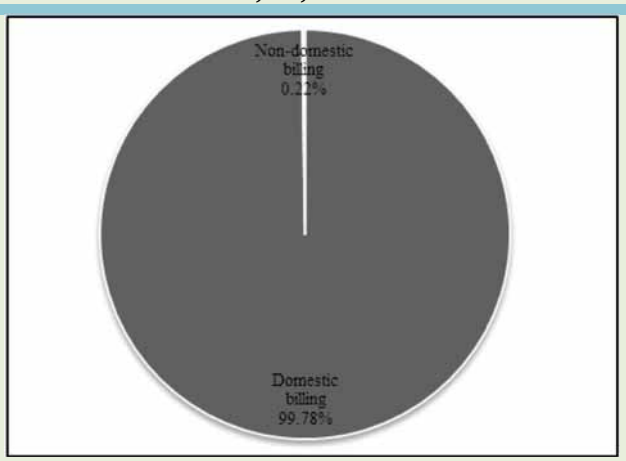
Total water connections	2,903
Domestic water connections	2,700.
Total sewer connections	-
Domestic sewer connections-	
Metering ratio	13.5%



ANNUAL WATER USE
1,204,500 m^3

Service Indicators

Water service coverage	52.3%
Average service hours	3
Per capita consumption	122lts/c/d
Average tariff	TZS 445./m^3



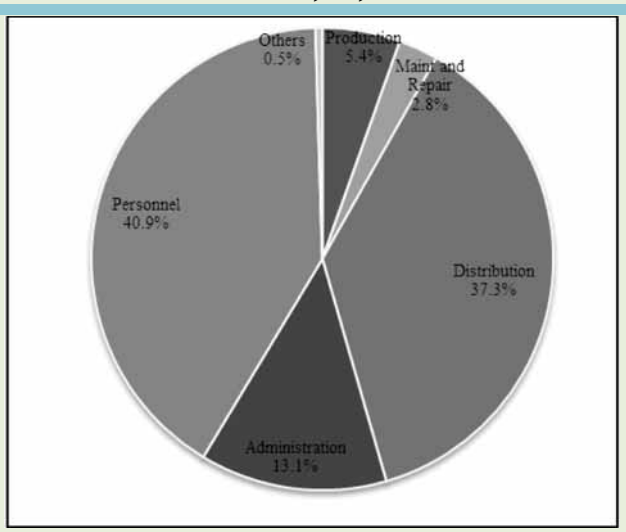
ANNUAL WATER SERVICES BILLING
TZS 176,617,000

Efficiency Indicators

Non-revenue water	30%
Unit production costs	TZS 343/m^3
Revenue collection efficiency	77%
Operating ratio	1.08
Account receivable	3.8.months
Staff/1000 connections	12.7

Income and Expenditure

Annual operating income from water and sewerage services	TZS 176,617,000
Government /Donor Grants	TZS -
Other income	TZS 3,105,000
TOTAL INCOME	**TZS 179,722,000**
Water Production Expenses	TZS 8,257,000
Water distribution expenses	TZS 56,542,000
Maintenance and Repair	TZS 4,192,000
Personnel Expenses	TZS 61,947,000
Administration Expenses	TZS 19,853,000
Other O&M Expenses	TZS 730,000
Total O&M expenses	**TZS 151,521,000**
Depreciation & Amortization	TZS 42,213,000
ANNUAL EXPENDITURE	**TZS 193,734,000**



ANNUAL O&M COSTS
TZS 151,521,000

NJOMBE URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (NJOMBE WSSA)

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. Its area of operation has a total population of 130,223 people while the currently served area of the utility has a population of 69,018. Proportion of Population Living in the area with water network is 53%. The Utility draws water from surface (Springs 100%). The Utility has no sewerage system.

General Data About Water Utility

Total water connections	4,330
Total waste water connections	-
Total staff	29
Annual O&M costs	TZS 527,548,976
Annual water and sewerage collections	TZS 311,766,120
Annual water and sewerage billing	TZS 343,709,056

Tariff Structure

Category of customer	Domestic	Institutions	Commercial	Kiosks
Metered (**TZS/m^3**)	395	550	560	20 per 20 litre jerry
Flat rate (**TZS/month**)	4,500 – 5,500	10,000	9,500	

New connection (water)	Reconnection	Service charge (Domestic)	Service charge (Non-domestic)
TZS.	**TZS.**	**TZS.**	**TZS.**

Priority of Needs

Based on its immediate plans, Njombe WSSA is striving to solve the following priority areas:
1. Inadequate water supply to meet the water demand 2. Lack of funds for financing construction of new Water Supply projects, rehabilitation and extension of distribution networks from existing scheme 3. Lack of water supply in the newly developed areas in the town with high demand 4. High Non Revenue Water 5. Insufficient storage facilities 6. Lack of water treatment facilities 7.
Lack of competent and qualified staff

Consumer Service

Average monthly consumption is about 8.7m^3 per connection, with per capita consumption of 57.3lts/day. Water is available at an average of 4 hours per day. Water quality compliance with WHO set standards are good with E-coli having 100% and turbidity is having 95% compliance. There were 3.6 pipe breaks per km per year recorded.

Performance Highlights

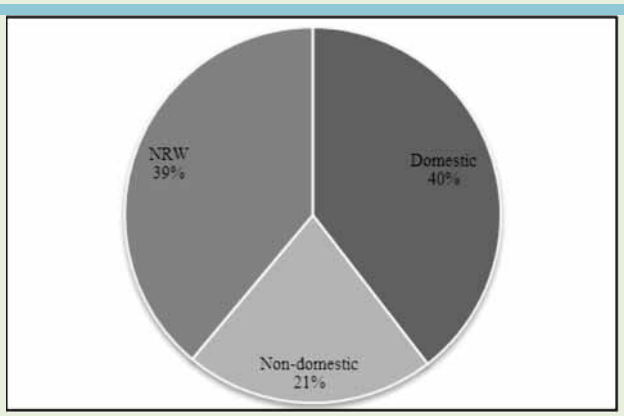
Njombe WSSA provides direct water supply to 41.8% of the population in its service area. NRW is still high and stands at 38.9%. A bigger portion of customers are metered and currently metering ratio is 81%. Operating ratio is 1.27 and accounts receivable equivalent is 1.1 months. Average tariff stands at TZS 395 per m^3. The ratio of staff per 1000 total connections ratio 6.7

NJOMBE URBAN WATER SUPPLY AND SEWERAGE AUTHORITY (NJOMBE WSSA)

Total Population in the Service Area: 56,038

Production/Distribution	
Average daily production	2,989.m^3
Production capacity/day	3,255m^3
Treatment type	Chlorination
Storage capacity	685m^3
Length of distribution network	56km

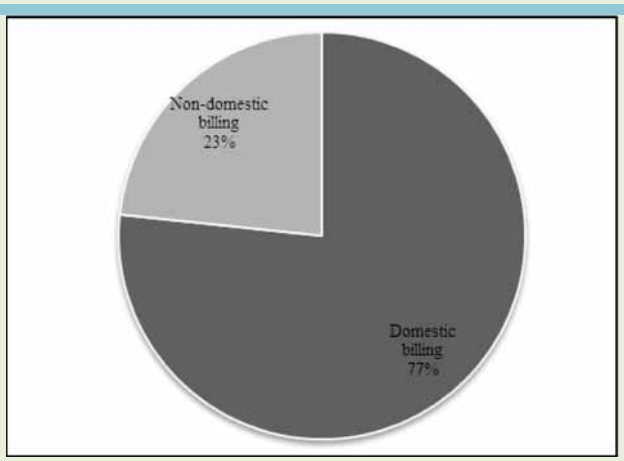
Service Connections	
Total water connections	4,330
Domestic water connections	4,128.
Total sewer connections	-
Domestic sewer connections	-
Metering ratio	81%



ANNUAL WATER USE
1,091,279 m^3

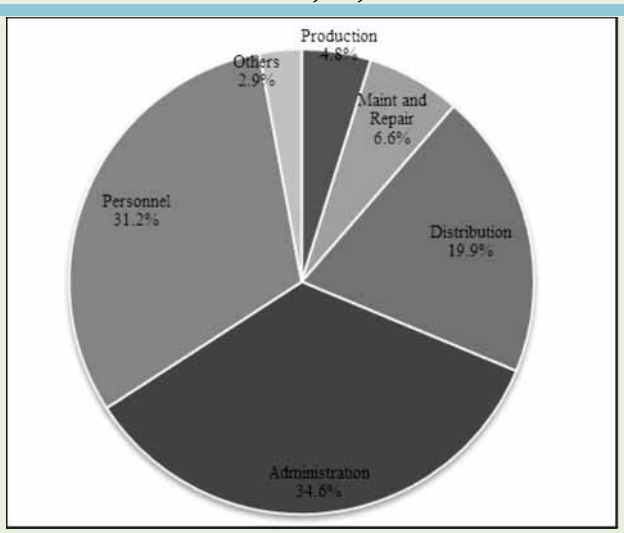
Service Indicators	
Water service coverage	53%
Average service hours	4
Per capita consumption	57.3lts/c/d
Average tariff	TZS 395/m^3

Efficiency Indicators	
Non-revenue water	38.9%
Unit production costs	TZS 343/m^3
Revenue collection efficiency	104%
Operating ratio	1
Account receivable	1 month
Staff/1000 connections	6.7



ANNUAL WATER SERVICES BILLING
TZS 343,709,056

Income and Expenditure	
Annual operating income from water and sewerage services	TZS 343,709,056
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 34,143,350
TOTAL INCOME	**TZS 377,852,406**
Water Production Expenses	TZS 18,006,928
Water distribution expenses	TZS 74,540,914
Maintenance and Repair	TZS 24,536,650
Personnel Expenses	TZS 116,916,230
Administration Expenses	TZS 129,522,440
Other O&M Expenses	TZS 10,911,600
Total O&M expenses	**TZS 374,434,762**
Depreciation & Amortization	TZS 104,783,534
ANNUAL EXPENDITURE	**TZS 479,218,296**



ANNUAL O&M COSTS
TZS 374,434,762

DAR ES SALAAM WATER AND SEWERAGE CORPORATION (DAWASCO) **Profile**

Water Utility

DAWASCO, a state owned Corporation, entered into a Lease Agreement with DAWASA to operate the water supply and sewerage services in the DAWASA service area that include Dar es Salaam and part of Kibaha and Bagamoyo in Coast Region. At the same time, DAWASA that was formed under the DAWASA Act of 2001 remained responsible for strategic planning, asset management and implementation of capital works. DAWASA operation area has a total population of 4,592,454 people while the current served area of the utility has a population of 2,860,149. The current percentage population coverage is 40.7%. The utility draws water from River Ruvu through upper Ruvu and lower Ruvu located in Mlandizi and Bagamoyo respectively, river Mzinga located in Dar es salaam and through thirty boreholes located in various areas within the service area. Only 25% of the total customers receive 24hrs water supply. The utility has a sewerage system with a sewer line of 199 km and sewerage treatment through 8 waste stabilization ponds. The average daily flow into the ponds is 1, 6716m^3/day (609,915 m^3/year).

General Data About Water Utility

Total Water Connections	130,964
Total Waste Water Connections	16,539
Total Staff	931
Annual O&M Costs	TZS 55,261,703,945
Annual Water and Sewerage Collections	TZS 37,464,386,579
Annual Water and Sewerage billing	TZS 44,577,053,000

Tariff Structure

WATER TARIFF

Category	Domestic	Institutions	Commercial	Industrial	Kiosks
TZS./m^3	1,077	1,077	1,077	1,077	637

Note :

1. The sewerage tariff is TZS 227/m^3
2. The flat for sewerage tariff was set basing on 80% of the water tariff

Priority of Needs

1. Reducing NRW; 2. Alternative sources to increase water production in order to meet the demand; 3. Reduction of inactive customers; 4. Increase sewerage network and number of connections to the sewerage network; 5. Increase the collection efficiency; 5. Universal metering.

Consumer Service

Average monthly consumption is about 20.m^3 per domestic connection, with per capita consumption of 18lts/day. Water is available at an average of 8 hours per day. Water quality compliance to WHO set standards is fair with E-coli having 100% compliance and Turbidity is having 100% compliance.

Performance Highlights

DAWASCO provides water supply to 40.7% of the population in its service area. NRW is still high at 55.5%. The metering ratio for DAWASCO customers is 93.6%. Operating ratio was at 1.22 Accounts receivables equivalent is 2.2months. Average tariff stands at TZS. 1119 per m^3 which covers operating expenses. Number of Staff per 1000 active water and sewerage connections ratio is 8.0.

DAR ES SALAAM WATER AND SEWERAGE CORPORATION (DAWASCO)

Total Population in the Service Area: 4,592,454

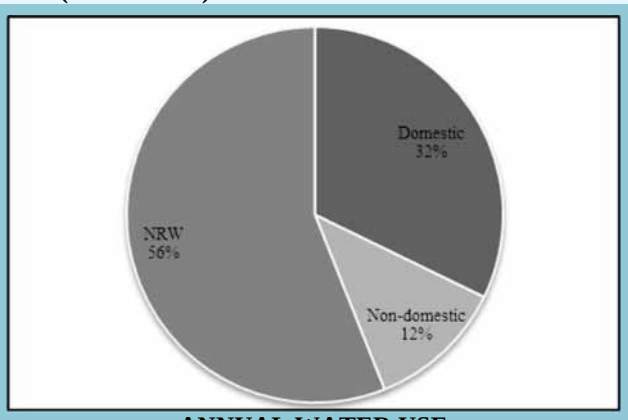
Production/Distribution	
Average Daily Production	257,845 m^3
Production capacity/day	280,500 m3
Treatment type	Conventional
Storage capacity	84,700m3
Service Area	1500km^2
Length of distribution Network	2,634km

Service Connections	
Total water connections	130,964
Domestic water connections	109,633
Total Sewer connections	21,742
Domestic sewer connections	19,384
Metering ratio	93.6%

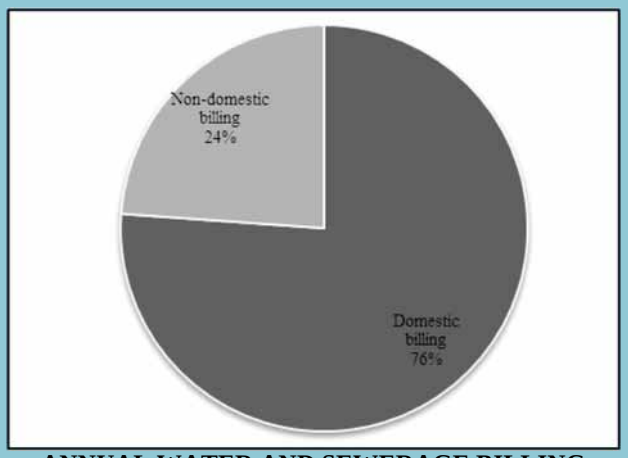
Service Indicators	
Water Service Coverage	67.5%
Average Service hours	8
Per Capita Consumption	55.65 l/c/d
Average Tariff	TZS 1119/m^3

Efficiency Indicators	
Non-Revenue Water	55.5%
Unit Production Cost	TZS 1191/m^3
Operating Ratio	1.22
Revenue Collection efficiency	76.9%
Account Receivable	2.2 months
Staff/1000 active connections	8

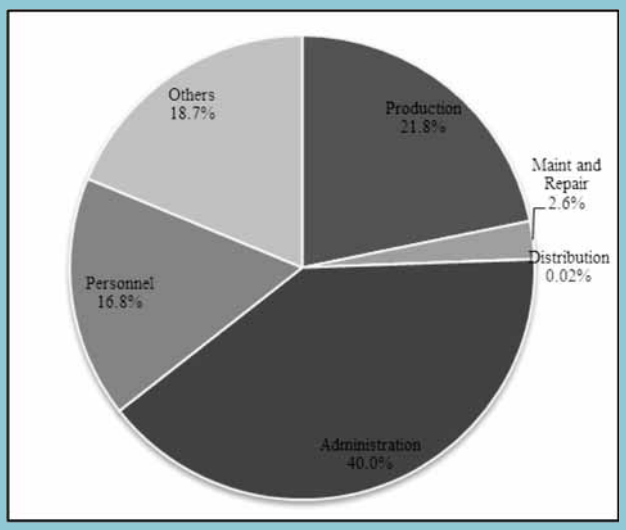
Income and Expenditure	
Annual operating income from water and sewerage services	TZS 44,577,053,000
Government /Donor Grants	TZS -
Amortized Grants	TZS -
Other income	TZS 1,291,378,000
TOTAL INCOME	**TZS 45,868,431,000**
Water Production Expenses	TZS 12,035,127,232
Water distribution expenses	TZS 9,312,500
Maintenance and Repair	TZS 1,455,687,000
Personnel Expenses	TZS 9,305,669,598
Administration Expenses	TZS 22,097,988,847
Other O&M Expenses	TZS 10,357,918,768
Total O&M expenses	**TZS 55,261,703,945**
Depreciation & Amortization	TZS 464,032,000
ANNUAL EXPENDITURE	**TZS 55,725,735,945**



ANNUAL WATER USE
94,113,280 m^3



ANNUAL WATER AND SEWERAGE BILLING
TZS 44,577,053,000



ANNUAL O&M COSTS
TZS 55,261,703,945

APPENDIX 2:
SUMMARY OF THREE YEARS DATA FOR KEY PERFORMANCE INDICATORS

Table A2.1(a) : Water Abstraction Trend

Utilities	ANNUAL WATER ABSTRACTION (Million Cubic Metres)																	
	2010/2011						2011/2012						2012/2013					
	B/Holes	Springs	Dams	Lakes	Rivers	Total	B/Holes	Springs	Dams	Lakes	Rivers	Total	B/Holes	Springs	Dams	Lakes	Rivers	Total
Arusha	5.29	6.43			2.54	**14.26**	4.63	6.42			2.29	**13.34**	5.23	6.36	0.00	0.00	2.54	**14.13**
Dodoma	9.84					**9.84**	11.12					**11.12**	10.85	-	-	-	-	**10.85**
Iringa		0.93			3.20	**4.13**		0.96			6.69	**7.64**	-	0.96	-	-	6.63	**7.60**
Mbeya		8.27			2.28	**10.55**		9.33			2.16	**11.49**	-	10.36	-	-	.37	**13.73**
Morogoro	0.02		7.67		1.46	**9.15**	0.03		7.01		1.78	**8.82**	0.09	-	9.13	-	.52	**11.73**
Moshi	1.23	8.18				**9.41**	1.32	7.95				**9.27**	1.41	7.74	-	-	-	**9.15**
Mtwara	2.28					**2.28**	2.59					**2.59**	2.34	-	-	-	-	**2.34**
Musoma				3.76		**3.76**				3.75		**3.75**	-	-	-	.82	-	**3.82**
Mwanza				23.59		**23.59**				22.83		**22.83**	-	-	-	3.06	-	**23.06**
Shinyanga			0.25	2.95		**3.19**				2.74		**2.74**	-	-	0.26	2.85	-	**3.11**
Songea			3.98			**3.98**		2.35			0.53	**2.88**	-	1.97	-	-	.92	**2.89**
Tabora	0.19		10.92			**11.11**	0.19		3.88			**4.06**	0.01	-	4.39	-	-	**4.40**
Tanga		2.65				**2.65**			10.92			**10.92**	-	-	1.41	-	-	**11.41**
Bukoba		0.34		1.40	0.56	**2.30**		0.43		1.25	0.99	**2.67**	-	0.46	-	1.46	1.02	**2.93**
Kigoma				4.10		**4.10**				4.52		**4.52**	0.00	0.00	0.00	4.63	0.00	**4.63**
Singida	1.43					**1.43**	1.38					**1.38**	1.43	-	-	-	-	**1.43**
Sumbawanga	0.01				1.65	**1.67**					1.82	**1.82**	0.01	0.00	0.00	0.00	1.69	**1.71**
Babati	0.63	0.47				**1.10**	0.70	0.39				**1.09**	0.82	0.35	-	-	-	**1.17**
Lindi	0.12	0.17				**0.29**	0.15	0.17				**0.32**	0.33	0.00	0.00	0.00	0.00	**0.33**
Bariadi			0.11			**0.11**			0.14			**0.14**	0.14	-	-	-	-	**0.14**
Geita						**0.00**						**0.00**	0.10	0.02	0.00	0.00	0.00	**0.12**
Mpanda						**0.00**	0.11		1.06		0.39	**1.57**	0.11	-	0.80	-	0.30	**1.22**
Njombe		1.06				**1.06**		1.17				**1.17**		1.09	0.00	0.00	0.00	**1.09**
Total	**21.05**	**28.49**	**22.91**	**35.80**	**11.70**	**119.96**	**22.22**	**29.15**	**23.01**	**35.10**	**16.65**	**126.13**	**22.88**	**29.30**	**25.98**	**35.81**	**19.00**	**132.97**

Table A2.1(b) Water Abstraction Summary

Source	2010/2011		2011/2012		2012/2013	
	Abstraction (Million m^3)	% contribution to total abstraction	Abstraction (Million m^3)	% contribution to total abstraction	Abstraction (Million m^3)	% contribution to total abstraction
REGIONAL WSSA WATER SOURCES						
Boreholes	21.05	18%	22.22	18%	22.88	17%
Springs	28.49	24%	29.15	23%	29.30	22%
Dams	22.91	19%	23.01	18%	25.98	20%
Lakes	35.80	30%	35.10	28%	35.81	27%
Rivers	11.70	9.8%	16.65	13.2%	19.00	14.3%
TOTAL	**119.96**	**100%**	**126.13**	**100%**	**132.97**	**100%**
DAWASCO WATER SOURCES						
Source	**Abstraction (Million m^3)**	**% contribution to total abstraction**	**Abstraction (Million m^3)**	**% contribution to total abstraction**	**Abstraction (Million m^3)**	**% contribution to total abstraction**
Lower Ruvu	65.07	65.1%	64.74	64.7%	67.06	66.6%
Upper Ruvu	30.76	30.8%	31.03	31.0%	29.10	28.9%
Mtoni	2.10	2.1%	2.39	2.4%	2.76	2.7%
Boreholes	1.99	2.0%	1.83	1.8%	1.83	1.8%
TOTAL DAWASCO	**99.92**	**100%**	**99.99**	**100%**	**100.76**	**100.00%**

Table A2.2: Water Demand, Water Production and Installed Water Production Capacity

Utility	Category	Water Demand (Million m3/year)			Annual Water Production(Million m3/year)			Installed Water Production Capacity (Million m^3/year)		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	19.36	34.04	34.04	14.18	13.34	14.13	20.37	20.37	20.02
Dodoma	A	19.71	19.97	19.71	9.84	10.15	10.81	16.43	16.52	16.52
Iringa	A	4.09	5.48	5.76	4.13	6.65	6.60	5.73	8.76	8.76
Mbeya	A	12.81	13.14	13.87	10.55	11.40	13.73	12.61	18.78	18.78
Morogoro	A	14.40	15.21	14.29	9.05	8.82	8.57	10.95	10.95	10.95
Moshi	A	14.89	14.89	16.17	9.41	9.27	9.15	10.45	10.92	11.47
Mtwara	A	5.23	5.32	4.51	2.01	2.31	2.33	3.20	3.10	3.10
Musoma	A	8.33	8.33	9.88	3.76	3.75	3.82	6.34	6.34	5.54
Mwanza	A	37.79	42.95	40.35	23.59	22.83	23.06	39.42	39.42	39.42
Shinyanga	A	6.15	6.64	6.15	3.18	2.92	3.11	19.38	19.38	19.38
Songea	A	3.34	3.44	4.70	2.52	2.80	2.81	4.20	4.20	4.20
Tabora	A	8.76	9.13	8.86	4.17	4.06	4.35	6.35	6.35	6.35
Tanga	A	9.67	11.83	11.00	9.85	10.23	10.40	15.33	15.33	15.33
Subtotal Category A		**164.52**	**190.36**	**189.30**	**106.25**	**108.54**	**112.86**	**170.77**	**180.43**	**179.83**
Bukoba	B	3.80	3.91	3.99	2.30	2.67	2.93	4.85	4.85	4.85
Kigoma	B	9.49	9.98	7.42	4.10	4.52	4.40	8.15	8.15	5.48
Singida	B	2.70	2.76	3.58	1.43	1.38	1.43	1.57	1.57	3.32
Sumbawanga	B	3.29	3.65	3.63	1.67	1.66	1.63	2.63	2.63	2.63
Babati	C	1.83	2.05	2.37	1.10	1.09	1.17	1.58	1.40	3.29
Lindi	C	1.83	2.55	3.05	0.29	0.32	0.38	0.34	0.34	1.48
Bariadi	C	0.82	1.05	1.87	0.11	0.14	0.14	0.30	0.30	0.30
Geita	C	2.04		5.16	0.07		0.12	0.22	0.22	0.22
Mpanda	C	2.01	2.12	3.10	1.05	1.57	1.20	1.73	1.73	1.73
Njombe	C	2.00	3.25	3.25	1.06	1.17	1.09	1.19	1.19	1.19
Subtotal Category B&C		**29.80**	**31.32**	**37.43**	**13.17**	**14.52**	**14.49**	**22.54**	**22.37**	**24.46**
TOTAL		**194.33**	**221.68**	**226.73**	**119.42**	**123.06**	**127.35**	**193.31**	**202.79**	**204.29**
DAWASCO		**174.91**	**181.08**	**189.80**	**92.12**	**89.50**	**94.11**	**102.10**	**102.10**	**102.10**

Table A2.3: Length of Water Network, Pipe Breaks, Water Storage Capacity and Water Connections per Km Length of Network

Utilities	Category	Total Length of Water Network (km)			No.of Pipe Breaks per km per year			Storage Capacity (hrs)			No. of Water Connections per Km Length of Network		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	250.5	251.3	261.0	1.6	1.6	2.0	6.6	3.7	3.3	126.4	131.8	132.4
Dodoma	A	268.0	301.0	301.0	0.0	3.7	15.1	32.0	31.6	35.0	81.8	80.7	90.1
Iringa	A	160.0	375.0	379.6	0.6	0.0	25.6	3.4	9.7	10.2	78.0	36.2	38.5
Mbeya	A	455.0	671.0	682.0	0.5	0.0	0.5	9.3	15.7	14.9	59.5	49.4	50.2
Morogoro	A	331.2	337.1	337.1	0.1	0.1	20.9	6.1	5.7	6.0	65.4	67.4	71.0
Moshi	A	358.7	354.1	355.5	1.4	6.0	0.4	5.1	5.2	4.8	51.7	56.2	58.4
Mtwara	A	205.0	205.0	221.4	0.1	0.8	1.9	6.1	6.0	7.2	36.0	38.5	38.1
Musoma	A	119.0	120.0	120.0	1.5	1.7	3.0	1.2	1.7	1.4	72.4	76.3	79.7
Mwanza	A	531.6	535.3	631.7	1.7	3.2	0.7	9.0	8.0	7.9	67.3	73.1	67.3
Shinyanga	A	510.0	435.0	439.6	0.8	0.6	0.3	27.1	31.1	31.1	26.2	31.9	33.0
Songea	A	282.5	298.0	303.9	0.1	6.1	6.2	10.6	10.3	7.5	32.4	32.6	35.1
Tabora	A	242.0	253.5	260.0	0.9	0.8	0.6	5.9	5.6	5.8	45.1	44.4	45.5
Tanga	A	515.8	534.2	551.0	0.1	4.0	3.7	9.0	7.5	8.0	46.6	47.7	49.6
Subtotal Category A		**4,229.4**	**4,670.5**	**4,843.8**	**0.7**	**2.2**	**6.2**	**10.1**	**10.9**	**11.0**	**60.7**	**58.9**	**60.7**
Bukoba	B	81.0	82.6	83.0	8.9	6.2	2.6	4.4	4.3	4.2	83.2	87.4	90.8
Kigoma	B	203.0	207.9	215.7	0.2	0.8	2.8	3.9	3.7	4.6	41.3	40.8	40.2
Singida	B	95.0	95.5	186.3	0.1	0.1	1.8	4.9	4.8	17.2	53.0	54.9	29.0
Sumbawanga	B	132.0	132.0	133.0	0.7	0.8	0.7	3.6	3.2	3.3	37.2	39.9	41.3
Babati	C	53.0	54.5	127.9	25.0	4.2	10.8	3.2	2.9	4.2	53.4	55.9	29.1
Lindi	C	110.0	110.0	128.8	3.0	2.9	6.4	7.9	10.6	8.8	20.5	13.8	15.0
Bariadi	C			23.7			1.0	3.9	3.1	1.7			19.3
Geita	C			16.2			1.4			0.6			24.1
Mpanda	C			74.0			0.8	2.3	2.2	1.5			39.2
Njombe	C			56.0			3.6	3.0	1.8	1.8			77.3
Subtotal Category B&C		**674.0**	**682.5**	**1,044.5**	**6.3**	**2.5**	**3.2**	**4.1**	**4.1**	**4.8**	**48.1**	**48.8**	**40.5**
TOTAL/AVERAGE		**4,903.4**	**5,352.9**	**5,888.3**	**2.5**	**2.3**	**4.9**	**7.7**	**8.1**	**9.4**	**56.7**	**55.7**	**51.9**
DAWASCO		**2,598.0**	**2,602.0**	**2,633.9**	**3.5**	**5.7**	**5.1**	**4.1**	**4.1**	**3.9**	**42.2**	**50.8**	**49.7**

Table A2.4: Non-revenue Water

Utilities	Cat.	NRW (%)				NRW (m3 lost/km/day)			NRW (m3 lost/connection/day)		
		2010/11	2011/12	2012/13	MoU Target	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	32.4	37.4	40.6	28.0	50.25	54.48	60.2	0.40	0.41	0.54
Dodoma	A	40.5	37.3	34.1	32.0	40.77	34.41	33.5	0.50	0.43	0.37
Iringa	A	33.1	56.2	46.5	32.0	23.46	27.26	22.1	0.30	0.75	0.61
Mbeya	A	31.4	34.5	35.2	27.0	19.97	16.07	19.4	0.34	0.33	0.39
Morogoro	A	28.5	27.6	22.9	25.0	21.31	19.80	15.9	0.33	0.29	0.25
Moshi	A	26.5	28.44	28.39	23.0	19.01	20.40	20.0	0.37	0.36	0.36
Mtwara	A	25.7	29.9	41.4	24.0	6.92	9.23	12.0	0.19	0.24	0.39
Musoma	A	47.0	47.2	45.3	40.0	40.71	40.42	39.5	0.56	0.53	0.67
Mwanza	A	46.4	42.8	40.7	25.0	56.37	50.02	40.7	0.84	0.68	0.65
Shinyanga	A	22.6	30.7	22	23.0	3.86	5.64	4.3	0.15	0.18	0.13
Songea	A	23.2	27.5	26.9	23.0	5.67	7.09	6.8	0.18	0.22	0.20
Tabora	A	26.8	25.0	32.7	24.0	12.64	10.97	15.0	0.28	0.25	0.53
Tanga	A	26.3	27.8	25.9	24.8	13.70	14.57	13.4	0.30	0.31	0.29
Average Category A		**31.6**	**34.8**	**34.0**	**27.0**	**24.20**	**23.88**	**23.3**	**0.36**	**0.38**	**0.41**
Bukoba	B	47.1	47.1	53.4	42.0	36.74	41.69	51.7	0.44	0.48	0.69
Kigoma	B	33.7	33.6	33.5	25.0	18.61	20.02	18.7	0.45	0.49	0.77
Singida	B	26.0	30.0	30.0	21.0	10.71	11.83	6.3	0.20	0.22	0.23
Sumbawanga	B	39.3	38.5	39.7	32.0	13.63	13.30	13.3	0.37	0.33	0.33
Babati	C	39.6	39.2	37.1	30.5	22.45	21.38	9.3	0.42	0.38	0.34
Lindi	C	35.2	36.2	47.4	31.0	2.54	2.93	3.8	0.12	0.21	0.33
Bariadi	C	34.6	24.5	25.0		4.23	4.02	4.1	0.24	0.21	0.34
Geita	C	31.0	31.0	24.0		3.76	0.00	4.8	0.35	0.00	0.29
Mpanda	C	50.0	62.4	49.0		19.41	36.14	21.9	0.57	0.99	0.64
Njombe	C	40.5	41.3	38.9		20.96	23.54	20.8	0.33	0.33	0.32
Average Category B&C		**37.7**	**38.4**	**37.8**	**30.3**	**15.30**	**17.48**	**15.5**	**0.35**	**0.36**	**0.43**
AVERAGE		**34.2**	**36.3**	**35.6**	**28.0**	**20.33**	**21.10**	**21.09**	**0.36**	**0.37**	**0.43**
DAWASCO		**49.9**	**49.8**	**55.5**	**30.0**	**48.49**	**46.89**	**54.4**	**1.03**	**0.92**	**1.17**

Table A2.5: Sewer Blockages, Length of Sewer Network, Number of Sewer Connections

Utilities	Category	Number of Sewer Blockages (Nr/km/year)			Length of Sewerage Network (Km)			Number of Sewer Connections / km Connections / km		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	46.95	47.07	41.41	44.17	44.17	45.45	91.62	94.88	93.74
Dodoma	A	10.32	4.83	6.14	73.00	74.96	76.20	58.52	58.51	59.84
Iringa	A	13.13	11.78	20.99	29.02	36.26	40.68	39.15	35.66	35.28
Mbeya	A	0.61	0.91	0.86	65.09	100.00	100.00	12.86	11.06	12.61
Morogoro	A	19.54	21.79	23.82	31.02	31.02	31.02	33.40	34.98	36.72
Moshi	A	16.78	16.02	21.98	50.30	53.80	56.00	44.35	41.34	30.04
Mwanza	A	16.39	8.61	10.93	31.00	59.00	61.00	64.55	49.29	52.33
Songea	A	1.95	4.43	5.76	37.00	37.00	37.00	23.19	26.70	28.49
Tabora	A	5.95	8.61	5.65	19.00	19.00	20.00	16.53	14.37	15.05
Tanga	A	7.80	14.07	12.20	34.69	34.84	34.84	72.00	72.34	74.43
AVERAGE/TOTAL		**13.94**	**13.81**	**14.98**	**414.29**	**490.05**	**502.18**	**45.62**	**43.91**	**43.92**
DAWASCO		**6.52**	**8.92**	**9.36**	**238.00**	**238.00**	**199.00**	**78.02**	**91.35**	**83.11**

Table A2.6 Water Quality Compliance (%)

		2010/11					2011/12					2012/13				
Utility	Cat.	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	100	97	100	99	100	100	93	100	98	100	100	95	100	99
Dodoma	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Iringa	A	100	98	100	100	100	100	100	99	100	100	100	100	98	100	99
Mbeya	A	100	100	100	100	100	100	100	98	100	100	100	100	99	100	100
Morogoro	A	95	94	100	100	97	100	81	100	54	84	100	96	100	100	99
Moshi	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mtwara	A	100	50	100	100	88	100	100	100	100	100	76	100	100	100	94
Musoma	A	0	0	0	0	0	75	0	43	100	54	97	0	0	98	49
Mwanza	A	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100
Shinyanga	A	100	98	96	99	98	99	97	96	99	98	100	96	96	100	98
Songea	A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Tabora	A	0	89	95	99	71	100	90	73	100	91	100	92	88	100	95
Tanga	A	99	100	97	100	99	91	100	97	100	97	100	100	96	100	99
AVERAGE CAT. A		**97.8**	**97.5**	**98.8**	**99.5**	**98.5**	**84**	**87**	**91**	**92**	**89**	**98**	**91**	**90**	**100**	**95**
Bukoba	B	59	99	60	82	75	61	100	70	98	82	73	100	70	92	84
Kigoma	B	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Singida	B	100	100	96	100	99	100	100	100	100	100	100	100	50	100	88
Sumbawanga	B	80	70	80	100	83	80	84	83	100	87	84	89	84	100	89
Babati	C	94	100	100	100	98	99	100	100	100	100	99	100	100	100	100
Lindi	C	100	100	100	100	100	100	100	100	100	100	99	100	86	100	96
Bariadi	C	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Geita	C											0	0	0	0	0
Mpanda	C											0	0	0	0	0
Njombe	C											100	95	98	100	98
AVERAGE CAT. B&C		**91.8**	**94.7**	**92.2**	**97.7**	**92**	**89**	**95**	**89**	**97**	**92**	**76**	**78**	**69**	**79**	**75**
OVERALL AVG.		**95.9**	**96.6**	**96.7**	**98.9**	**96.5**	**86**	**89**	**91**	**94**	**90**	**88**	**86**	**81**	**91**	**86**
DAWASCO		**100**	**100**	**100**	**82**	**95.5**	**100**	**100**	**96**	**100**	**99**	**100**	**96**	**100.0**	**79**	**94**

Table A2.6a: Comparison between Regional and EWURA Water and Wastewater Effluent Quality Test Results (%)

		Regional WSSAs' Test Results						EWURA's Test Results					
Utility	**Cat.**	**E-coli**	**Turbidity**	**Residual Chlorine**	**pH**	**BOD_5**	**COD**	**E-Coli**	**Turbidity**	**Residual Chlorine**	**pH**	**BOD_5**	**COD**
Arusha	A	100	100	95	100	0	0	80	100	78	100	0	0
Dodoma	A	100	100	100	100	100	100	100	100	80	100	100	0
Iringa	A	100	100	98	100	48	48	75	100	75	38	0	0
Mbeya	A	100	100	99	100	100	100	50	92	50	100	0	100
Morogoro	A	100	96	100	100	65	65	50	100	50	100	0	0
Moshi	A	100	100	100	100	100	100	89	100	57	100	100	100
Mtwara	A	76	100	100	100	na	na	83	71	71	86	na	na
Musoma	A	97	0	0	98	na	na	0	100	17	33	na	na
Mwanza	A	99	100	100	100	100	100	100	100	83	100	0	0
Shinyanga	A	100	96	96	100	na	na	89	100	77	100	na	na
Songea	A	100	100	100	100	100	100	100	100	100	100	100	100
Tabora	A	100	92	88	100	na	na	78	100	67	100	na	na
Tanga	A	91	100	96	100	na	na	100	100	100	20	0	0
AVERAGE CAT. A		**97**	**91**	**90**	**100**	**77**	**77**	**76**	**97**	**70**	**83**	**33**	**33**
Bukoba	B	73	100	70	92	na	na	71	100	71	100	na	na
Kigoma	B	100	100	100	100	na	na	17	100	17	100	na	na
Singida	B	100	100	50	100	na	na	90	100	38	100	na	na
Sumbawanga	B	84	89	84	100	na	na	33	100	67	100	na	na
Babati	C	99	100	100	100	na	na	89	100	100	100	na	na
Lindi	C	99	100	86	100	na	na	100	100	100	100	na	na
Bariadi	C	100	100	100	100								
Geita	C	0	0	0	0								
Mpanda	C	0	0	0	0								
Njombe	C	100	95	98	100								
AVERAGE CAT. B&C		**76**	**78**	**69**	**79**			**67**	**100**	**65**	**100**		
OVERALL AVG.		**88**	**86**	**81**	**91**	**77**	**77**	**73**	**98**	**68**	**88**	**33**	**33**
DAWASCO		**100**	**96**	**100.0**	**79**	**0**	**0**	**100**	**100**	**100.0**	**100**	**0**	**0**

Table A2.7 Wastewater Quality Compliance (BOD5 and COD)

Utilities	Category	Compliance with BOD_5 Standards (%)				Compliance with COD Standards (%)			
		2010/11	2011/12	2012/13	MoU Target	2010/11	2011/12	2012/13	MoU Target
Arusha	A	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0
Dodoma	A	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Iringa	A	60.0	0.0	48.0	100.0	60.0	0.0	48.0	100.0
Mbeya	A	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Morogoro	A	85.4	87.0	64.6	95.0	85.4	87.0	64.6	95.0
Moshi	A	49.0	83.0	100.0	99.0	38.0	97.0	100.0	99.0
Mwanza	A	95.0	95.0	100.0	95.0	90.0	100.0	100.0	99.0
Songea	A	100.0	100.0	100.0	94.0	100.0	100.0	100.0	94.0
Tabora	A	NA	NA	NA	100.0	NA	NA	NA	100.0
Tanga	A	NA	NA	NA	NA	NA	NA	NA	NA
AVERAGE		**73.7**	**70.6**	**76.6**	**92.6**	**71.7**	**73.0**	**76.6**	**93.0**
DAWASCO		**24.0**	**0.0**	**0.0**		**0.0**	**0.0**	**0.0**	

Table A2.8 Total Water Connections, Domestic Connections and Public Water Kiosks

Utilities	Category.	Total Water Connections (Number)			Domestic Water Connections (Number)			Public Water Kiosks (Number)				
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	working	MoU Target
Arusha	A	31,675	33,106	34,561	29,201	30,619	32,049	79	118	120	89	79
Dodoma	A	21,934	24,293	27,134	20,443	22,639	25,397	118	161	217	217	118
Iringa	A	12,486	13,587	14,628	11,655	12,651	13,695	126	136	65	63	126
Mbeya	A	27,088	33,136	34,248	26,103	32,124	33,197	154	154	154	154	154
Morogoro	A	21,662	22,730	23,929	20,426	21,329	22,608	76	105	105	76	76
Moshi	A	18,530	19,899	20,776	16,668	18,026	18,855	115	148	148	106	151
Mtwara	A	7,377	7,883	8,442	6,977	7,449	7,980	24	36	39	39	24
Musoma	A	8,618	9,155	9,569	7,995	8,479	8,841	18	21	21	5	18
Mwanza	A	35,771	39,145	42,486	33,056	36,023	39,060	143	144	149	146	143
Shinyanga	A	13,370	13,878	14,499	12,490	12,955	13,525	82	166	173	67	82
Songea	A	9,153	9,712	10,666	8,545	9,070	9,912	55	55	55	16	16
Tabora	A	10,908	11,264	11,837	10,169	10,454	10,977	74	144	148	84	74
Tanga	A	24,015	25,505	27,358	22,525	23,940	25,727	241	279	280	230	241
Total Category A		**242,587**	**263,293**	**280,133**	**226,253**	**245,758**	**261,823**	**1,305**	**1,667**	**1,674**	**1,292**	**1,302**
Bukoba	B	6,743	7,217	7,533	6,144	6,590	6,887	37	40	43	40	37
Kigoma	B	8,388	8,486	8,664	8,080	8,124	8,349	3	57	55	13	3
Singida	B	5,036	5,242	5,399	4,461	4,649	4,789	44	53	54	54	44
Sumbawanga	B	4,914	5,263	5,496	4,628	4,976	5,206	10	17	17	17	10
Babati	C	2,831	3,045	3,728	2,527	2,711	3,349	23	29	41	37	23
Lindi	C	2,251	1,516	1,930	1,972	1,321	1,678	47	47	69	69	47
Bariadi	C	422	450	458	393	421	421	7	6	7	5	
Geita	C	172	172	391	152	152	345	7	7	7	5	
Mpanda	C	2,515	2,713	2,903	2,415	2,518	2,700	52	52	52	26	
Njombe	C	3,554	3,968	4,330	3,189	3,555	4,128	4	2	2	1	
Total Category B&C		**36,826**	**38,072**	**40,832**	**33,961**	**35,017**	**37,852**	**234**	**310**	**347**	**267**	**164**
TOTAL		**279,413**	**301,365**	**320,965**	**260,214**	**280,775**	**299,675**	**1,539**	**1,977**	**2,021**	**1,559**	
DAWASCO		**122,836**	**132,088**	**130,964**	**109,633**	**120,606**	**125,893**	**151**	**151**	**151**	**59**	

Table A2.9 Metering Ratio and Composition of Metered Customers

Utilities	Cat.	Metering Ratio (%)				Composition of Metered Customers 2012/13				
		2010/11	2011/12	2012/13*	MoU Target	Domestic	Institutional	ommercial	Industrial	Kiosk
Arusha	A	100.0	100.0	100.0	100	32,049	439	1,528	-	120
Dodoma	A	100.0	100.0	100.0	100	745	775	0	-	217
Iringa	A	95.0	96.4	100.0	100	13,310	395	326	-	63
Mbeya	A	92.2	100.0	98.5	100	32,700	323	562	-	154
Morogoro	A	88.7	88.5	99.1	97	20,001	444	673	-	76
Moshi	A	100.0	100.0	100.0	100	18,855	341	1,372	-	148
Mtwara	A	100.0	100.0	100.0	100	7,980	136	281	-	39
Musoma	A	62.6	60.9	71.9	75	4,539	198	365	14	10
Mwanza	A	100.0	100.0	100.0	100	37,372	934	388	794	144
Shinyanga	A	90.0	90.9	100.0	100	13,525	410	326	65	173
Songea	A	86.4	87.1	90.8	95	8,797	250	392	-	16
Tabora	A	81.8	59.4	100.0	100	6,791	225	228	25	84
Tanga	A	100.0	100.0	100.0	100	25,727	471	698	171	280
Average/Total Cat. A		**92.1**	**94.8**	**98.6**	**97**	**222,391**	**5,341**	**7,139**	**1,069**	**1,524**
Bukoba	B	88.3	85.9	91.5	95	5,215	167	238	10	37
Kigoma	B	40.3	43.1	98.9	80	4,847	182	110	10	13
Singida	B	69.0	73.0	88.0	100	4,013	214	120	-	54
Sumbawanga	B	74.2	72.1	75.2	95	3,737	96	143	1	12
Babati	C	100.0	100.0	100.0	100	3,349	173	165	-	41
Lindi	C	31.4	63.0	69.2	90	838	75	39	0	69
Bariadi	C	11.0	11.0	20.0		37	15	0	0	7
Geita	C	39.0	39.0	12.4		23	5	0	0	5
Mpanda	C	8.6	10.9	13.5		275	31	24	1	5
Njombe	C	57.9	70.1	81.0		2,840	44	72	0	1
Average/Total Category B&C		**52.0**	**64.3**	**81.2**	**93**	**25,174**	**1,002**	**911**	**22**	**244**
OVERALL AVERAGE/TOTAL		**74.6**	**83.2**	**96.6**	**96**	**247,565**	**6,343**	**8,050**	**1,091**	**1,768**
DAWASCO		**80.6**	**81.9**	**93.6**		**109,940**	**603**	**3,577**	**268**	**190**

*** Metering ratios for 2012/13 were computed based on active water connections**

Table A2.10: Proportion of Population Living in the Service Area, Number of Households and Proportion of Population Served with Water

Utilities	Cat.	Proportion of Population Living in the area with water network (%)				Proportion of Population Directly Served with water (%)			
		2010/11	2011/12	2012/13	MoU Target	2010/11	2011/12	2012/13	MoU Target
Arusha	A	97.5	70.4	78.4	98.0	79.0	64.0	70.4	88.0
Dodoma	A	88.7	86.7	81.4	94.0	58.0	58.0	70.2	58.0
Iringa	A	96.0	84.0	95.8	98.0	83.0	80.9	93.8	82.0
Mbeya	A	95.0	96.2	96.8	98.0	82.6	89.0	88.3	86.0
Morogoro	A	94.0	94.0	90.0	97.0	63.2	60.9	71.8	43.0
Moshi	A	95.3	95.3	100.0	98.0	88.0	92.4	89.4	96.0
Mtwara	A	81.7	92.5	87.6	90.0	67.0	68.0	51.6	88.0
Musoma	A	59.6	76.0	82.0	70.0	46.0	65.5	54.0	47.0
Mwanza	A	93.4	90.0	93.9	98.0	58.7	61.0	75.6	52.0
Shinyanga	A	77.5	78.3	58.5	82.0	66.1	71.2	44.0	76.0
Songea	A	81.0	87.8	64.2	88.0	79.0	85.0	61.2	86.0
Tabora	A	86.5	86.5	76.9	90.0	59.7	68.1	66.2	77.0
Tanga	A	92.0	98.4	99.4	96.0	86.0	86.3	94.5	92.0
Total Category A		**87.6**	**87.2**	**87.7**	**92.1**	**70.5**	**70.4**	**74.5**	**74.7**
Bukoba	B	71.1	71.1	76.3	80.0	51.0	54.0	52.3	52.0
Kigoma	B	67.0	68.7	70.7	75.0	39.0	41.9	59.5	44.0
Singida	B	88.0	89.5	88.4	84.0	62.3	76.5	74.3	80.0
Sumbawanga	B	62.8	61.6	36.7	92.0	37.0	41.9	26.0	49.0
Babati	C	68.4	68.5	84.4	85.0	44.9	53.1	84.2	53.0
Lindi	C	41.0	41.0	70.3	70.0	34.0	34.0	65.3	55.0
Bariadi	C	39.7	39.7	39.7	50.0	32.3	24.0	33.6	40.0
Geita	C	54.3	54.3	54.3	15.0	44.7	44.7	6.6	8.0
Mpanda	C	52.0	52.0	52.0	64.0	57.4	58.0	41.8	
Njombe	C	53.0	53.0	53.0	60.0	69.1	53.0	22.8	
Total Category B&C		**66.4**	**67.1**	**62.2**	**68.9**	**44.7**	**47.1**	**43.9**	**47.6**
TOTAL/AVERAGE		**80.9**	**83.7**	**80.1**	**88.6**	**62.3**	**66.3**	**65.9**	
DAWASCO		**67.5**	**67.5**	**44.9**		**51.3**	**46.4**	**40.7**	

Table A2.11: Number of Sewerage Connections and Proportion of Population Connected to Sewerage Network

Utilities	Category	Total Sewerage Connection (Number)			Domestic Sewerage Connections (Number)			Proportion of Population Connected to Sewerage Network (%)			
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	MoU Target
Arusha	A	4,047	4,191	4,260	3,184	3,303	3,349	14.2	17.0	7.6	15
Dodoma	A	4,272	4,386	4,560	3,823	3,911	4,133	7.6	8.0	14.0	23
Iringa	A	1,136	1,293	1,435	1,033	1,187	1,326	12.3	12.9	16.7	12
Mbeya	A	837	1,106	1,261	778	1,015	1,160	4.6	8.6	9.5	12
Morogoro	A	1,036	1,085	1,139	837	871	918	3.4	3.2	3.4	5
Moshi	A	2,231	2,224	2,260	1,655	1,654	1,682	27.6	26.0	29.0	29
Mwanza	A	2,001	2,908	3,192	1,552	2,401	2,523	4.0	3.6	4.1	35.8
Songea	A	858	988	1,054	761	870	922	6.7	8.5	7.7	9
Tabora	A	314	273	301	261	251	240	1.2	6.0	7.1	7
Tanga	A	2,495	2,520	2,593	2,249	2,277	2,335	9.5	9.6	9.4	9
TOTAL/AVERAGE		**19,227**	**20,974**	**22,055**	**16,133**	**17,740**	**18,588**	**8.7**	**8.9**	**9.2**	**15.7**
DAWASCO		**18,568**	**21,742**	**16,539**	**17,672**	**19,384**	**19,384**	**7.0**	**7.4**	**7.4**	

Table A2.12: Average Hours of Service and Proportion of Connection with 24 Hours of Service

Utilities	Category	Average Hours of Service				Proportion of Population with 24 Hours of Service (%)		
		2010/11	2011/12	2012/13	MoU Target	2010/11	2011/12	2012/13
Arusha	A	20.3	15.2	12.0	18.0	45.0	16.0	11.8
Dodoma	A	20.0	21.0	19.0	20.0	10.3	11.0	0.0
Iringa	A	21.7	23.5	24.0	24.0	70.8	86.0	99.8
Mbeya	A	21.0	23.0	21.0	24.0	70.0	74.7	81.0
Morogoro	A	16.8	17.6	17.4	22.0	28.0	38.5	0.3
Moshi	A	23.0	19.6	20.0	23.5	89.0	25.0	27.0
Mtwara	A	15.7	13.0	13.6	24.0	26.1	27.0	27.7
Musoma	A	22.0	18.0	18.9	24.0	81.0	85.0	0.0
Mwanza	A	22.0	22.0	22.0	24.0	9.9	39.9	31.4
Shinyanga	A	23.0	20.0	21.3	24.0	99.0	99.0	57.7
Songea	A	23.3	23.8	17.1	24.0	80.1	83.0	33.1
Tabora	A	21.4	21.4	18.2	23.0	52.3	52.3	6.0
Tanga	A	24.0	23.5	23.5	24.0	9.6	86.3	95.0
Average Category A		**21.1**	**20.1**	**19.1**	**23.0**	**71.3**	**51.6**	**36.2**
Bukoba	B	17.0	21.5	21.3	22.0	71.0	21.5	68.6
Kigoma	B	20.0	9.0	9.1	12.0	15.0	9.0	0.1
Singida	B	5.0	5.0	5.7	20.0	0.0	5.0	0.0
Sumbawanga	B	15.0	15.0	10.6	19.0	16.0	15.0	10.0
Babati	C	12.0	12.0	14.0	16.0	20.0	12.0	1.2
Lindi	C	3.0	3.0	6.0	6.0	9.0	3.0	0.0
Bariadi	C	14.0	12.0	16.0				0.0
Geita	C	18.0	18.0	4.0				0.0
Mpanda	C	8.0	3.0	3.0				6.1
Njombe	C	8.0	9.0	6.0				3.0
Average Category B&C		**12.0**	**10.8**	**9.6**	**15.8**	**21.8**	**10.9**	**8.9**
OVERALL AVERAGE		**17.1**	**16.0**	**14.9**	**20.7**	**42.2**	**41.5**	**24.3**
DAWASCO		**8.0**	**8.0**	**8.0**		**12.0**	**25.0**	**25.0**

Table A2.13: Revenue Collection Efficiency, Accounts Receivables and Overall Efficiency Indicator

Utilities	Category	Revenue Collection Efficiency (%)				Accounts Receivables (months)			Overall Efficiency Indicator (OEI) %		
		2010/11	2011/12	2012/13	MoU Target 2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	94.4	85.0	87.3	96	3.6	2.5	3.6	63.8	53.1	51.9
Dodoma	A	95.1	92.1	95.2	96	1.6	2.1	2.6	56.6	57.8	62.7
Iringa	A	86.9	87.4	90.0	98	3.6	3.3	3.2	58.1	38.3	48.2
Mbeya	A	95.6	89.1	93.0	95	2.0	2.9	2.9	65.5	58.4	60.3
Morogoro	A	93.7	98.9	92.3	97	0.4	1.1	0.7	67.0	71.6	71.2
Moshi	A	94.7	96.9	91.0	97	2.6	2.6	3.3	69.6	69.4	65.2
Mtwara	A	66.2	73.5	77.7	80	3.3	2.8	3.9	49.2	51.5	45.5
Musoma	A	99.0	89.2	98.1	98	3.3	3.5	2.7	52.5	47.1	53.6
Mwanza	A	93.6	89.8	106.1	97	3.1	3.3	2.7	50.2	51.4	59.3
Shinyanga	A	85.2	86.1	104.3	97	2.7	1.9	2.6	66.0	59.7	78.0
Songea	A	70.2	75.0	68.8	70	2.9	2.6	1.7	53.9	54.4	50.3
Tabora	A	90.4	85.4	75.6	98	7.4	5.7	6.5	66.2	64.0	50.8
Tanga	A	97.3	92.0	95.5	97.8	1.8	1.4	1.8	71.8	66.5	70.8
Average Category A		**89.4**	**87.7**	**90.4**	**93.60**	**2.9**	**2.7**	**2.9**	**60.8**	**57.2**	**59.1**
Bukoba	B	95.0	94.0	78.7	95	3.2	3.5	3.4	50.2	49.8	36.7
Kigoma	B	20.2	73.2	86.0	90	7.5	1.4	3.1	13.4	48.6	57.2
Singida	B	84.5	70.1	101.1	95	2.6	3.5	3.3	62.5	49.8	70.0
Sumbawanga	B	71.1	85.6	92.0	94	2.7	3.3	3.4	43.1	52.7	55.4
Babati	C	82.3	82.2	95.9	92	1.2	1.4	1.4	49.8	50.0	60.3
Lindi	C	101.5	74.7	82.0	92	3.0	2.4	3.4	65.8	47.7	43.1
Bariadi	C	0.0	43.5	80.0	90	0.0	0.1	2.0	0.0	32.9	60.0
Geita	C	0.0	0.0	80.1	85	0.0	0.0	1.3	0.0	0.0	60.9
Mpanda	C	0.0	28.7	77.0		0.0	3.2	3.8	0.0	28.7	39.3
Njombe	C	0.0	83.0	104.0		0.0	0.5	1.1	0.0	57.2	61.1
Average Category B&C		**45.5**	**63.5**	**87.7**	**93.0**	**2.0**	**1.9**	**2.6**	**28.5**	**41.7**	**54.4**
OVERALL AVERAGE		**70.3**	**77.2**	**89.2**	**93.4**	**2.5**	**2.4**	**2.8**	**46.7**	**50.5**	**57.0**
DAWASCO		**77.4**	**78.3**	**76.9**		**2.9**	**4.0**	**2.2**	**38.8**	**39.4**	**34.2**

Table A2.14: Billing Composition and Domestic Billing

Utilities	Category	Water Billing (Millions TZS)			Sewerage Billing (Millions TZS)			Other Operational Billing (Million TZS)			Domestic Billing (Million TZS)		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	3,567	4,009	4,994	222	273	349	756	665	902	2,463	2,789	3,335
Dodoma	A	3,961	4,867	6,071	309	316	382	957	1,079	1,194	3,364	3,644	4,562
Iringa	A	2,182	2,533	3,109	221	294	372	154	197	214	1,271	1,464	2,122
Mbeya	A	2,683	2,967	4,064	157	337	580	904	1,133	1,186	1,631	1,707	2,562
Morogoro	A	3,708	4,865	5,319	65	77	84	528	645	458	2,821	3,418	3,519
Moshi	A	2,578	2,991	2,989	308	395	396	732	765	705	1,747	2,141	2,084
Mtwara	A	879	965	920	-	-	-	237	508	338	652	601	690
Musoma	A	1,314	1,305	1,520	-	-	-	42	67	107	851	890	1,000
Mwanza	A	6,800	9,358	10,876	414	609	786	1,081	1,794	1,091	4,244	4,410	6,669
Shinyanga	A	1,554	1,920	2,183	-	-	-	353	462	601	1,031	1,433	1,791
Songea	A	926	1,075	1,060	92	103	101	150	460	324	593	744	758
Tabora	A	1,628	1,833	2,129	39	41	46	73	169	575	595	999	1,036
Tanga	A	3,412	4,139	5,350	130	129	148	556	603	876	2,410	2,934	3,800
Subtotal Category A		**35,191**	**42,827**	**50,584**	**1,957**	**2,574**	**3,244**	**6,523**	**8,546**	**8,572**	**23,673**	**27,175**	**33,927**
Bukoba	B	737	903	991	-	-	-	155	373	261	436	662	665
Kigoma	B	585	1,059	1,662	-	-	-	93	144	178	355	659	1,003
Singida	B	547	689	786	-	-	-	40	24	19	255	306	329
Sumbawanga	B	406	557	516	-	-	-	44	99	88	285	296	441
Babati	C	447	448	523	-	-	-	172	143	164	327	259	303
Lindi	C	178	164	219	-	-	-	22	21	195	165	69	107
Bariadi	C			36			-			8		-	32
Geita	C			42			-			38		-	41
Mpanda	C			177			-			3		-	176
Njombe	C			330			-			48		-	263
Subtotal Category B&C		**2,899**	**3,820**	**5,282**	**-**	**-**	**-**	**526**	**804**	**1,002**	**1,823**	**2,251**	**3,360**
TOTAL		**38,090**	**46,648**	**55,866**	**1,957**	**2,574**	**3,244**	**7,049**	**9,349**	**9,574**	**25,496**	**29,425**	**37,287**
DAWASCO		**30,800**	**33,656**	**40,385**	**2,560**	**3,125**	**4,192**	**1,437**	**1,667**	**1,291**	**24,106**	**34,099**	**33,941**

Table A2.15Cost Structure: Total O&M, Production, Distr & Maintenance and Admin. Costs

Utilities	Category	Total O & M Costs (Millions TZS)			Production, Distribution and Maintenance (Millions TZS)			Administration Costs (Millions TZS)		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	4,139	4,893	4,809	1,366	1,697	1,500	1,083	1,176	1,187
Dodoma	A	4,857	5,698	6,748	1,882	2,065	2,592	1,114	1,408	1,474
Iringa	A	2,389	2,962	3,436	1,051	1,367	1,504	525	603	730
Mbeya	A	3,200	3,914	5,263	637	1,127	1,841	848	862	1,142
Morogoro	A	4,078	5,277	5,454	1,410	1,967	2,018	1,095	1,099	1,109
Moshi	A	3,080	3,969	3,496	872	1,245	694	825	1,110	1,026
Mtwara	A	1,269	1,445	1,380	402	434	412	342	384	325
Musoma	A	1,358	1,519	1,722	535	618	826	249	249	225
Mwanza	A	7,876	11,889	11,866	3,068	3,979	5,073	1,393	1,905	2,173
Shinyanga	A	2,131	2,467	2,532	954	1,413	1,478	383	432	412
Songea	A	1,242	1,665	1,832	348	403	405	203	298	340
Tabora	A	1,636	2,047	2,354	751	974	1,115	340	407	417
Tanga	A	3,665	4,401	5,296	1,111	1,298	1,553	1,067	1,317	1,517
Total Category A		**40,921**	**52,147**	**56,190**	**14,389**	**18,585**	**21,013**	**9,467**	**11,250**	**12,075**
Bukoba	B	929	1,022	1,254	284	350	409	221	205	296
Kigoma	B	1,421	1,396	2,153	710	611	700	199	262	295
Singida	B	654	1,021	941	175	197	244	171	191	259
Sumbawanga	B	405	505	710	31	40	68	112	113	194
Babati	C	594	547	617	149	101	152	220	190	188
Lindi	C	303	307	682	115	126	284	80	87	154
Bariadi	C	-	144	123	-	91	38	-	4	41
Geita	C	-	-	79	-	-	34	-	-	18
Mpanda	C	-	176	152	-	85	69	-	16	20
Njombe	C	-	362	374	-	179	117	-	91	130
Total Category B&C		**4,307**	**5,481**	**7,086**	**1,464**	**1,780**	**2,115**	**1,004**	**1,159**	**1,594**
GRAND TOTAL		**45,227**	**57,628**	**63,275**	**15,852**	**20,365**	**23,128**	**10,471**	**12,408**	**13,669**
DAWASCO		**39,684**	**40,601**	**55,262**	**12,022**	**12,565**	**13,500**	**10,667**	**12,384**	**22,098**

Table A2.16: Cost Structure: Personnel Costs and Other Costs

Utilities	Category	Personnel Costs (Millions TZS)			Other Costs (Millions TZS)		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	1,391	1,696	1,715	298	324	406
Dodoma	A	1,679	1,869	2,274	182	356	408
Iringa	A	667	860	1,108	146	133	93
Mbeya	A	1,475	1,737	2,059	241	189	220
Morogoro	A	1,461	2,075	2,239	111	136	88
Moshi	A	1,176	1,357	1,619	206	257	157
Mtwara	A	464	583	623	61	44	21
Musoma	A	565	639	655	9	13	16
Mwanza	A	2,526	3,504	4,032	889	2,502	589
Shinyanga	A	772	593	619	23	29	23
Songea	A	407	610	577	284	355	510
Tabora	A	511	581	780	33	86	42
Tanga	A	1,299	1,501	1,907	188	285	319
Total CategoryA		**14,393**	**17,602**	**20,208**	**2,672**	**4,710**	**2,893**
Bukoba	B	399	405	523	26	61	26
Kigoma	B	314	490	816	198	32	341
Singida	B	296	622	415	12	11	24
Sumbawanga	B	245	301	423	18	51	25
Babati	C	211	242	269	13	14	8
Lindi	C	105	78	155	3	16	89
Bariadi	C	-	31	45	-	18	1
Geita	C	-	-	26	-	-	1
Mpanda	C	-	74	62	-	1	1
Njombe	C	-	84	117	-	9	11
Total Category B&C		**1,570**	**2,328**	**2,850**	**270**	**214**	**526**
GRANDTOTAL		**15,963**	**19,930**	**23,059**	**2,941**	**4,924**	**3,420**
DAWASCO		**8,257**	**9,107**	**9,306**	**8,738**	**6,545**	**10,358**

Table A2.17: Working Ratio, Operating Ratio and Average Tariff in use

Utilities	Category	Working Ratio				Operating Ratio				Average Tariff in Use (TZS/m3)		
		2010/11	2011/12	2012/13	MoU Target 2012/13	2010/11	2011/12	2012/13	MoU Target 2012/13	2010/11	2011/12	2012/13
Arusha	A	0.91	0.99	0.77	0.86	1.00	1.08	0.85	0.88	405	482	577
Dodoma	A	0.93	0.91	0.88	0.95	1.10	1.08	1.02	0.83	694	758	822
Iringa	A	0.93	0.98	0.93	0.82	1.07	1.08	1.77	0.97	686	796	852
Mbeya	A	0.85	0.88	0.90	0.90	1.00	1.00	1.22	0.99	409	432	513
Morogoro	A	0.95	0.94	0.93	0.90	1.13	1.09	1.37	0.95	565	770	770
Moshi	A	0.85	0.96	0.85	0.81	0.85	1.06	0.96	0.91	384	469	469
Mtwara	A	1.14	0.98	1.10	0.70	1.40	1.18	1.37	0.75	622	622	696
Musoma	A	1.00	1.11	1.06	0.95	1.17	1.27	1.06	1	598	621	672
Mwanza	A	0.95	1.01	0.93	0.57	1.18	1.18	1.12	0.85	481	682	805
Shinyanga	A	1.12	1.04	0.91	1.00	1.29	1.17	1.11	1.1	603	923	923
Songea	A	1.06	1.02	1.23	0.97	2.21	1.83	2.30	0.99	470	607	607
Tabora	A	0.94	1.00	0.86	0.90	1.20	1.14	0.99	0.98	630	651	695
Tanga	A	0.89	0.90	0.83	0.72	1.23	1.18	1.04	1.27	475	565	698
Average Category A		**0.96**	**0.98**	**0.94**	**0.85**	**1.22**	**1.18**	**1.24**	**0.96**	**540**	**645**	**700**
Bukoba	B	1.04	0.80	1.00	0.90	1.31	0.98	1.19	0.95	593	666	759
Kigoma	B	2.10	1.16	1.17	1.10	2.23	1.26	1.23	1.2	328	532	772
Singida	B	1.11	1.43	1.17	1.00	1.32	1.61	1.40	1.2	642	730	796
Sumbawan	B	0.90	0.77	1.17	0.85	1.08	0.89	1.42	0.86	351	508	508
Babati	C	0.96	0.93	0.90	0.92	1.19	1.16	1.40	1.19	678	693	724
Lindi	C	1.51	1.66	1.65	0.90	1.78	2.11	1.89	1	700	700	900
Bariadi	C	0.00	1.54	2.77		0.00	2.51	5.57	0.92	553	585	585
Geita	C	0.00	0.00	0.99		0.00	0.00	1.12	0.87	254	300	300
Mpanda	C	0.00	0.96	0.84		0.00	1.24	1.08		404	445	445
Njombe	C	0.00	1.11	0.99		0.00	1.57	1.27		354	395	395
Average Category B&C		**0.76**	**1.04**	**1.27**	**0.95**	**0.89**	**1.33**	**1.76**	**1.07**	**486**	**555**	**618**
OVERALL AVERAGE		**0.88**	**1.00**	**1.08**	**0.88**	**1.08**	**1.25**	**1.47**	**0.99**	**516**	**606**	**665**
DAWASCO		**1.14**	**1.06**	**1.20**		**1.16**	**1.07**	**1.21**		**850**	**850**	**1119**

Table A2.18: Total Staff, Female Staff and Staff per 1,000 Water & Sewerage Connections

Utilities	Category.	Total Staff (Number)			Total Female Staff (Number)			Staff/1000 Connections (W&S)			
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	MoU Target
Arusha	A	189	188	197	42.0	43	47	5.3	5.0	5.1	5.0
Dodoma	A	211	221	230	60.0	52	54	8.1	7.7	7.3	7.0
Iringa	A	93	92	97	17.0	18	22	6.8	6.2	6.0	7.0
Mbeya	A	201	227	222	61.0	62	69	7.2	6.6	6.3	7.0
Morogoro	A	161	164	163	31.0	31	30	7.1	6.9	6.5	6.5
Moshi	A	144	155	156	51.0	56	56	6.9	7.0	6.8	7.0
Mtwara	A	63	60	63	12.0	9	11	8.5	7.6	7.5	6.0
Musoma	A	82	80	77	22.0	22	20	9.5	8.7	8.0	7.0
Mwanza	A	254	266	285	45.0	59	61	6.7	6.3	6.2	7.0
Shinyanga	A	87	91	74	18.0	18	19	6.5	6.6	5.1	9.0
Songea	A	54	55	58	17.0	17	18	5.4	5.1	4.9	6.0
Tabora	A	90	95	93	23.0	25	21	8.0	8.2	7.7	8.0
Tanga	A	130	145	151	33.0	36	37	4.9	5.2	5.0	5.2
Total/Ave. Category A		**1,737**	**1,839**	**1,866**	**393.0**	**448**	**465**	**7.0**	**6.5**	**6.2**	**6.7**
Bukoba	B	64	62	62	14.0	15	15	9.5	8.6	8.2	9.0
Kigoma	B	75	68	68	9.0	9	9	8.9	8.1	7.8	8.0
Singida	B	68	69	69	8.0	8	10	13.5	13.2	12.8	8.0
Sumbawanga	B	37	42	47	9.0	9	9	7.5	8.0	8.6	7.5
Babati	C	41	46	48	7.0	9	9	14.5	15.1	12.9	12.0
Lindi	C	33	41	42	4.0	6	9	14.7	27.2	21.8	11.0
Bariadi	C	18	22	18	3.0	3	4	42.7	48.9	39.3	
Geita	C	11	11	12			2	64.0	64.0	30.7	
Mpanda	C	30	31	37	6.0	6	6	11.9	11.4	12.7	
Njombe	C	26	25	29	4.0	4	8	7.3	6.3	6.7	
Total/Av Category B&C		**403**	**417**	**432**	**64.0**	**69**	**81**	**19.4**	**11.0**	**10.6**	**9.3**
TOTAL/AVER		**2,070**	**2,256**	**2,298**	**443.0**	**517**	**546**	**8.4**	**7.0**	**6.8**	**7.5**
DAWASCO		**897**	**894**	**943**	**275.0**	**265**	**271**	**12.4**	**5.8**	**6.4**	

Table A2.19: Water Service Connections Rehabilitation and Water Mains Rehabilitation % per year

Utilities	Category	Water Service Connections Rehabilitation (% per year)			Water Mains Rehabilitation (% per year)		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	0.1	0.2	0.4	1.4	0.2	0.0
Dodoma	A	0.0	0.0	0.0	0.3	2.5	1.5
Iringa	A	0.0	9.8	21.2	0.0	0.0	3.8
Mbeya	A	0.2	0.4	0.4	0.7	0.6	0.7
Morogoro	A	0.0	0.0	28.3	0.0	0.0	0.1
Moshi	A	2.2	0.1	0.0	0.6	0.0	0.0
Mtwara	A	0.5	0.0	17.1	11.9	0.0	2.7
Musoma	A	0.0	0.0	0.0	9.8	0.0	0.5
Mwanza	A	0.0	0.1	0.0	0.3	0.8	0.3
Shinyanga	A	0.9	5.0	0.0	0.1	5.7	0.0
Songea	A	0.0	0.0	1.1	0.0	0.4	0.0
Tabora	A	0.6	0.3	14.4	1.0	10.7	11.2
Tanga	A	0.0	0.1	0.0	0.4	0.4	0.7
Average Category A		**2.9**	**0.3**	**6.4**	**0.5**	**1.6**	**1.7**
Bukoba	B	1.9	0.0	0.0	3.2	1.9	0.4
Kigoma	B	0.6	0.8	1.4	0.0	0.0	0.0
Singida	B	1.4	0.6	0.0	0.5	3.6	0.0
Sumbawanga	B	0.0	19.3	0.3	0.2	22.7	4.2
Babati	C	0.1	5.9	1.6	0.2	0.4	0.2
Lindi	C	6.9	9.6	5.0	13.0	2.6	3.1
Bariadi	C			0.0			0.2
Geita	C			0.4			3.0
Mpanda	C			0.1			0.4
Njombe	C			35.0			2.3
Average Category B&C		**1.8**	**6.0**	**4.4**	**2.8**	**5.2**	**1.4**
AVERAGE		**0.8**	**2.8**	**5.5**	**2.3**	**2.8**	**1.5**
DAWASCO		**4.2**	**10.2**	**10.9**	**1.6**	**1.1**	**0.0**

Table A2.20: Total Collections

Utilities	Categ.	Water and Sewerage Collections (Millions TZS)			Other Collections (Millions TZS)			Total Collections (Millions TZS)		
		2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
Arusha	A	3,507	3,801	5,117	721	886	313	4,228	4,687	5,430
Dodoma	A	4,229	5,306	6,773	80	378	122	4,309	5,683	6,895
Iringa	A	1,856	2,471	3,157	534	487	190	2,390	2,958	3,347
Mbeya	A	3,212	3,643	4,612	307	347	289	3,519	3,991	4,901
Morogoro	A	3,762	5,253	4,893	225	131	453	3,987	5,384	5,346
Moshi	A	2,656	3,505	3,159	508	4	3	3,164	3,509	3,162
Mtwara	A	677	825	878	401	330	253	1,078	1,156	1,131
Musoma	B	1,300	1,164	1,601	127	170	-	1,427	1,334	1,601
Mwanza	A	6,700	9,538	14,009	649	-	-	7,349	9,538	14,009
Shinyanga	A	1,539	1,882	2,574	183	131	-	1,722	2,014	2,574
Songea	A	670	1,015	1,212	141	40	-	812	1,055	1,212
Tabora	A	1,507	1,599	1,637	22	-	287	1,529	1,599	1,924
Tanga	A	3,592	4,247	5,595	350	48	48	3,942	4,294	5,643
Total Category A		**35,209**	**44,250**	**55,216**	**4,248**	**2,952**	**1,959**	**39,456**	**47,202**	**57,175**
Bukoba	B	800	979	1,057	150	-	-	951	979	1,057
Kigoma	B	118	777	1,175	586	441	372	704	1,218	1,547
Singida	B	483	489	727	217	306	-	700	795	727
Sumbawanga	B	300	528	593	203	179	-	503	707	593
Babati	C	431	436	517	80	7	10	510	443	527
Lindi	C	181	123	180	49	46	82	230	169	261
Bariadi	C	-	41	31.43	-	2	15		42	46
Geita	C	-	-	50.53	-	-	4		-	54
Mpanda	C	-	138	163.48	-	44	32		182	196
Njombe	C	-	305	311.77	-	5	30		310	342
Total Category B&C		**2,312.86**	**3,814.92**	**4,806.23**	**1,284.56**	**1,030.47**	**544.13**	**3,597.41**	**4,845.40**	**5,350.36**
TOTAL		**37,521.39**	**48,064.60**	**60,022.08**	**5,532.33**	**3,982.41**	**2,502.85**	**43,053.72**	**52,047.01**	**62,524.93**
DAWASCO		**25,836.93**	**28,815.24**	**37,464.39**	**2,494.99**	**2,060.39**	**2,263.63**	**28,331.91**	**30,875.63**	**39,728.02**

APPENDIX 3: COMPLIANCE WITH REGULATORY DIRECTIVES (Reporting Tariff Conditions and Performance Targets as per Lease Contract between DAWASA and DAWASCO)

Table A3.1: Status of Submission of Monthly MajIs Reports, Draft Technical Annual Report and Draft Financial Statements

Utility	MajIs Monthly Reports		Draft Technical Annual Report		Draft Financial Statements	
	Submission Date	Remarks	Submission Date	Remarks	Submission Date	Remarks
ARUSHA	23 Aug 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*
DODOMA	26 Aug 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*
IRINGA	15 Aug 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*	27 Sept 2013	*Timely Submission*
MBEYA	15 Aug 2013	*Timely Submission*	24 Oct 2013	*Late Submission*	24 Oct 2013	*Late Submission*
MOROGORO	5 Sep 2013	*Timely Submission*	24 Oct 2013	*Late Submission*	24 Oct 2013	*Late Submission*
MOSHI	15 Aug 2013	*Timely Submission*	1 Oct 2013	*Late Submission*	1 Oct 2013	*Late Submission*
MTWARA	15 Aug 2013	*Timely Submission*	04 Oct 2013	*Late Submission*	04 Oct 2013	*Timely Submission*
MUSOMA	15 Aug 2013	*Timely Submission*	11 Nov 2013	*Late Submission*	09 Oct 2013	*Late Submission*
MWANZA	14 Aug 2013	*Timely Submission*	1 Oct 2013	*Late Submission*	27 Sept 2013	*Timely Submission*
SHINYANGA	16 Aug 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*
SONGEA	10 Jul 2013	*Submitted only Jul – Dec 2012*	5 Nov 2013	*Late Submission*	30 Sept 2013	*Timely Submission*
TABORA	22 Aug 2013	*Timely Submission*	11 Oct 2013	*Late Submission*	6 Sept 2013	*Timely Submission*
TANGA	16 Aug 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*
BUKOBA	28 Aug 2013	*Timely Submission*	27 Nov 2013	*Late Submission*	9 Oct 2013	*Late Submission*
KIGOMA	20 Aug 2013	*Timely Submission*	21 Nov 2013	*Late Submission*	21 Oct 2013	*Late Submission*
SINGIDA	16 Aug 2013	*Timely Submission*	19 Oct 2013	*Late Submission*	19 Oct 2013	*Late Submission*
S'WANGA	24 Aug 2013	*Timely Submission*	23 Oct 2013	*Late Submission*	16 Sept 2013	*Timely Submission*
BABATI	3 Sept 2013	*Timely Submission*	2 Sept 2013	*Timely Submission*	30 Sept 2013	*Timely Submission*
LINDI		*Not Submitted*	30 Oct 2013	*Late Submission*	03 Oct 2013	*Timely Submission*
BARIADI		*Not Submitted*	8 Oct 2013	*Late Submission*	8 Oct 2013	*Late Submission*
GEITA		*Not Submitted*	23 Oct 2013	*Late Submission*	05 Nov 2013	*Late Submission*
MPANDA		*Not Submitted*	2 Nov 2013	*Late Submission*	7 Nov 2013	*Late Submission*
NJOMBE		*Not Submitted*	5 Nov 2013	*Late Submission*	11 Nov 2013	*Late Submission*
DAWASCO	12 Aug 2013	*Submitted only 7 monthly reports*	25 Nov 2013	*Late Submission*	24 Oct 2013	*Late Submission*

Note: ***The deadline for submission of all the reports was 30th September, 2013***

Table A3.2: Evaluation on Compliance with Tariff Order Conditions

ARUSHA WSSA (Order No. 018-012 of 1st January, 2013)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th June 2013, AUWSA shall submit to EWURA their detailed customer outreach programme for the years 2013/14 and 2014/15.	30th June, 2013	0%	Not implemented
2. On or before 30th March 2013, AUWSA shall prepare and submit to EWURA plan to seek financing mechanisms including loans and grants for its investment programs in the new expanded area of 115 square kilometer following upgrading of Arusha Municipality into City status;	30th March 2013	0%	Not implemented
3. On or before 30th June 2013, AUWSA shall prepare and submit to EWURA plan of expanding the sewerage system and improve its performance in reducing sewer blockages.	30th June 2013	0%	Not implemented
4. On before 30th June 2013, AUWSA shall prepare and submit to EWURA a plan for pressure zoning its service area to balance water pressure that will result into clear water rationing schedule.	30th June 2013	0%	Not implemented
5. AUWSA shall attain the key performance indicators shown in the third schedule of this order	30th June 2013	44	Only one indicator, Response to written complaints was attained. Others including new water and sewerage connections and NRW were not attained.
6. On or before 28th February 2013, AUWSA shall submit a reviewed Business Plan which incorporates condition of this order; and	28th February 2013	100	The Reviewed Business Plan was submitted as required and on time.
7. AUWSA 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 AUWSA'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 requests for tariff adjustment.	Continuous	100	AUWSA has continued to provide required information/data through MajIs and other reports as required. AUWSA submitted Annual Technical, MAJIS reports and draft financial statement on time.
Overall Performance	**7 Conditions**	**35%**	

DODOMA WSSA (Tariff Order No: ORDER №. 12-004 of 02/03/2012)

Condition	Due date	Compliance Evaluation	Remarks
1. DUWASA 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 DUWASA'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 requests for tariff adjustment.	Continuous	100%	DUWASA has continued to provide required information/data through MajIs and other reports as required. DUWASA submitted Annual Technical, MAJIS and Financial Statements reports on time
Overall Compliance	**1 Condition**	**100%**	

IRINGA WSSA (ORDER № 12- 005 of 02nd March, 2012)

Condition	Due date	Compliance Evaluation	Remarks
1. IRUWASA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information shall be used by EWURA to evaluate IRUWASA'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 requests for tariff adjustment	Continuous	100%	The information about financial and operation are provided to EWURA on monthly basis.
Overall Compliance	**1 Condition**	**100%**	

MBEYA WSSA (Order № 019/012 of 19th December, 2012)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th June, 2013 Mbeya UWSA shall submit to EWURA their detailed customer outreach programme for the years 2012/13 to 2014/15 which shall include, among other things, dissemination of their Client Service Charter	30th June, 2013	100%	Customer Outreach programme is on place. Revised Client charter is available.
2. Mbeya UWSA shall use proceeds from the service charge for maintenance of customer service connections from the main distribution line to the customer water meter	30th June, 2013	100%	This is implemented. Customers are no longer responsible in making repairs of their pipes as it was in the past

Condition	Due date	Compliance Evaluation	Remarks
3. Mbeya WSSA shall implement the projects shown in the Second Schedule of this Order using own funds to be generated from the approved tariff:		52%	Project implementation status on the 2nd SCHEDULE: Most of the activities are in progress.
4. Mbeya WSSA shall attain the key performance indicators shown in the Third Schedule of this Order;	Implementation by 30th June 2013	96%	Implementation status on the 3rd SCHEDULE: Attainment of targets is good except for rise of NRW which was attributed by increased pressures of water after increase of production from 32,600 to 38,000 m3/per day
5. Mbeya 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 Mbeya 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 requests for tariff adjustment	Continuous	50%	Mbeya WSSA has continued to provide reports and information as required although has not been compliant with the deadlines. Only MajIs reports were submitted on time
6. On or before 31st March 2013, Mbeya WSSA shall submit a revised Business plan which incorporates conditions of this Order.	31st March 2013	100%	Revised Business plan was submitted
Overall Compliance	**6 Conditions**	**83%**	

MOSHI WSSA (Tariff Order № 11-106 of 1st July, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th September, 2011, MUWSA shall provide a plan to reduce Non-Revenue Water from 28.5 % to less than 22 % by 30th June 2013.	30th June 2013	0%	The reported NRW as of 30th June 2013 is 28.4 which is far the required the target of 22%
2. On or before 30th September 2012, MUWSA shall submit to EWURA a detailed expenditure for the ring fenced funds amounting to TZS 439,499,937 provided for depreciation and TZS 1,028,270,214 provided for investment as part of the approved revenue requirement for 2011/12.	30th September 2012	95%	The detailed of the expenditure for the ring fenced fund was submitted as required. 95% of the planned activities were fully implemented.
3. MUWSA 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 MUWSA's performance in	Continuous	50%	MUWSA has continued to provide reports and information as required and compliant to the deadlines. MajIs report was submitted on time; the Technical Annual and Draft Financial

Condition	Due date	Compliance Evaluation	Remarks
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 requests for tariff adjustment			statement were submitted late. .
Overall Performance	**3 Conditions**	**48.3%**	

MOROGORO WSSA (Tariff Order № 11-004 of March, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. Morogoro 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 Tabora 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 requests for tariff adjustment. In particular, Morogoro WSSA shall ensure that the accuracy of information provided in the MajIs monthly reports is improved.	Continuous	50%	MOROGORO WSSA has continued to provide required information/data through MajIs and other reports as required. MajIs reports and Financial reports were submitted on time, but the Annual Report – Technical & Financial were submitted later than 30th Sept, 2013
Overall Compliance	**1 Conditions**	**50%**	

MUSOMA WSSA (Order № 10-001 of 25th January, 2010)

Condition	Due date	Compliance Evaluation	Remarks
1. Musoma WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA	Continuous	50%	MajIs reports were submitted on time but Annual Progress Report and Financial Statements were submitted late.
Overall Compliance	**1 Condition**	**50%**	

MWANZA WSSA (Order № 11-014 of 26th July, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. Reduce NRW from 46.9% progressively to 20% by june,2015	June,2015	56.37%	Still on progress, NRW is progressively reduced and was by 42.6%, 2013.

Condition	Due date	Compliance Evaluation	Remarks
2. Supply water to all areas which are located at higher altitudes than the existing water tanks, especially Mji Mwema in Nyamanoro Ward by june,2013	June 2013	0%	Not Implemented, the project for this intervention was planned under WSDP and was expected to be implemented between 2009 and 2011.
3. Construct 5 new small water booster stations and tanks in Buhongwa, Igogo, Nyegezi-California, Ibanda and Buswelu areas and construct secondary distribution lines by December,2012	December 2012	0%	Not Implemented, this project will be implemented from 2013/13 to 2014/15 under European Investment Bank (EIB) and French Development Agency (FDA) and the Government of the United Republic of Tanzania.
4. On or before 31st October, 2012, Mwanza WSSA shall submit to EWURA a detailed expenditure for ring fenced funds amounting to TZS 2,223,140,756.78 provided for Depreciation and TZS 1,964,638,336.19 provided for return on investment,	31st October, 2012	100%	Submitted
5. Mwanza WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA.	Continuous	75%	MajIs reports submission and Financial Statements for the 2012/13 financial year were submitted on time, but the Annual Report was submitted late
Overall Compliance	**5 Conditions**	**46.3%**	

MTWARA WSSA (Tariff Order № 08-012 of 3rd October, 2008)

Condition	Due date	Compliance Evaluation	Remarks
1. Mtwra 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 utilities 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	75%	MTWARA WSSA has continued to provide required information/data through MajIs and other reports as required. MajIs reports and Financial reports were submitted on time, but the Annual Report – Technical were submitted later than 30th Sept, 2013
Overall Compliance	**1 Conditions**	**75%**	

SHINYANGA WSSA (Tariff Order № 11 - 010 of 8th April 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th September, 2012, SHUWASA shall increase its collection efficiency from the current 78% to at least 90%	30/9/2012	100%	By the end of year 2011/2012, Shinyanga WSSA has reported the overall collection efficiency of 92% and estimated an improvement of this indicator in the coming year.
2. On or before 30th September, 2012, Shinyanga WSSA shall submit a status report on the implementation of customer outreach programme. A status report on the implementation of that programme shall be included in all future applications for tariff and charges adjustment and considered by EWURA in evaluating the reasonableness thereof.	30/9/2012	50%	The programme was submitted together with the annual report, but implementation has not yet started.
3. Shinyanga WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA's "Water Utilities Information System". This information will be used by EWURA to evaluate Shinyanga WSSA 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 requests for tariff adjustments.	Continuous	100%	Shinyanga WSSA has continued to provide required information/data through MajIs and other reports as required. All reports were submitted on time
Overall Compliance	**3 Conditions**	**83.3%**	

TANGA WSSA (Order № 020-012 of 19th December, 2012)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th June 2013, Tanga UWASA shall submit to EWURA their detailed customer outreach programme for the year 2013/14	30th June 2013	100%	The Detailed Customer Outreach Programme was submitted in time.
2. Tanga UWASA shall implement the projects in the Second Schedule of this order using own funds to be generated from the approved tariffs;	30th June 2013	78%	Status report on the implementation of the Project for 2012/13 was submitted as required and 78% of the planned activities were implemented.

Condition	Due date	Compliance Evaluation	Remarks
3. TANGA UWASA shall attain the key performance indicators shown in the third schedule of the order	30th June 2013	60%	Three Performance indicators were attained (New water connections, water quality and response to written complaints. Indicators that were not fully complied are NRW, New sewerage connections and personnel as percentage of actual collections from water and sewerage.
4. On or before 31st March 2013, Tanga UWASA shall submit to a revised Business Plan which incorporates condition of this order.	31st March 2013	100%	The Revised Business Plan was submitted in time as required.
5. Tanga UWASA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirement of EWURA. This information shall be used by EWURA to evaluate Tanga UWASA'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 requests for tariff adjustment.	Continuous	100%	Tanga UWASA has continued to provide reports and information as required and compliant to the deadlines. Tanga UWASA submitted Annual Technical, MAJIS reports and draft financial statement on time
Overall Compliance	**5 conditions**	**88%**	

SONGEA WSSA (Tariff Order № 11-002 of 23rd March, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. Songea 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 Songea WSSA 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 requests for tariff adjustment. In particular, Songea WSSSA shall ensure that the accuracy of information provided in monthly reports is improved	Continuous	50%	Only 6monthly reports were submitted through MajIs and the Draft Financial statement was submitted on time. Technical annual report was submitted late.
Overall Compliance	**1 Conditions**	**50%**	

Condition	Due date	Compliance Evaluation	Remarks
1. Tabora 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 Tabora 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 requests for tariff adjustment. In particular, Tabora WSSA shall ensure that the accuracy of information provided in the MajIs monthly reports is improved.	Continuous	75%	Tabora WSSA has continued to provide required information/data through MajIs and other reports as required. MajIs reports and Financial reports were submitted on time, but the Technical Annual Report was submitted later than 30th Sept, 2013
Overall Compliance	**1 Conditions**	**75%**	

BUKOBA WSSA (Order № 11-019 of 16th December, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. Reduce NRW from 47% to 30% or less by 30th june,2013	30th June,2013	0%	NRW has increased to 53.4% by June, 2013.
2. Bukoba WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA and also copies of the progress report on the on-going water supply project	Continuous	50%	In MajIs records are available up to June, 2013. The Financial Statement and Annual Progress Report were submitted late.
Overall compliance	**2 Conditions**	**25%**	

SINGIDA WSSA (Tariff Order № 11-020 of 16th December 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 31st March, 2012, Singida WSSA shall submit its plan to:	31/03/2012		Singida WSSA did not submit the implementation
1.1 Reduce Non Revenue Water (NRW) from the current value of 26% to 20% or less by 30th June, 2013	30/06/2013	0%	Singida WSSA has reported 30% NRW, which has been maintained for the last two years increasing from the baseline value of 26%.
1.2 Raise the current metering ratio from 69% to 100% by 30th June, 2013	30/06/2013	46%	By 30th June, 2013, Singida WSSA has reported metering ratio of 81.6%. Singida WSSA expects to reach 100% metering ratio by the end of 2013/2014 after completion of the ongoing water project.

Condition	Due date	Compliance Evaluation	Remarks
2. Singida WSSA shall include in all its future reports submission to EWURA, a status report on implementation of the following investment activities: (i) Rehabilitation of broken pumps and installation of new pump at Uhasibu and Kititimo boreholes; (ii) Construction of pumping main connecting the boreholes at Utemini and Kititimo to the respective booster stations (iii) Fencing all boreholes well fields; and (iv) Construction of additional office building	annual	100%	Singida WSSA has included in its annual report the status of implementation of the activities as required. The broken pumps were rehabilitated. Fencing of the boreholes is on-going depending on the availability of funds. Construction of the pumping main to connect the Kititimo and Utemini boreholes will no longer be necessary after completion of the water project. Additional office building awaits funding from the MoW
3. On or before 30th September, 2012, Singida WSSA shall submit a status report on the implementation of customer outreach programme. A status report on the implementation of that programme shall be included with all future applications for tariff and charges adjustment and considered by EWURA in evaluating the reasonableness thereof	30/12/2012	25%	Customer outreach programme was submitted to EWURA on time; however, its implementation status has not been reported in the annual report as required.
4. Singida WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA, and also copies of the progress report on the on-going water supply project. This information will be used by EWURA to evaluate Singida WSSA 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 requests for tariff adjustment.	Continuous	50%	Singida WSSA has continued to provide reports and information as required. MajIs reports were timely submitted, but the annual report – technical and financial were submitted late.
Overall Compliance	**5 Conditions**	**44.2%**	

LINDI WSSA (Order № 5-011 of 24th May, 2012)

Condition	Due date	Compliance Evaluation	Remarks
1. Lindi WSSA shall submit to EWURA its plan to reduce Non revenue water from the current 33% to 28% by 30th June 2014;	30th December 2012	0%	Plan was not submitted and the NRW achieved was 37%. The target was not met due to increased production by 65% that led to increase in losses due to old age of the pipes.

Condition	Due date	Compliance Evaluation	Remarks
2. Lindi WSSA shall submit to EWURA its plan to increase water coverage and extend services to lower income and per-urban areas,	30th December, 2012,	50%	Plan was not submitted though the Water coverage has increased from 34% to 65.3%, for the entire Lindi WSSA's service area
3. Lindi WSSA shall submit to EWURA its plan to Enhance and extend sewerage and sanitation facilities adequately and acquire land for sewerage ponds by 30th June 2014..	30th December, 2012,	100%	Land for sewerage pond has been acquired at Mitwero area. The construction is in progress under Seven Town Upgrading project expected to be completed by March 2014
4. Lindi WSSA shall meter all its customers;	30th June 2013,	0%	Metering ratio was 69.2% during the reporting period. Non-compliance was due to the delay of completion of Lindi Immediate works Project. Under this project customer meter and bulk meter will be supplied and installed.
5. Lindi WSSA shall purchase and install two surface pumps in order to maintain the water production level at the Mbanja water source;	30th June 2013	0%	Lindi WSSA did not submit the plan to EWURA. The reasons mentioned by Lindi WSSA is that the plan was changed after technical evaluation to determined the yield of the boreholes as a result Lindi WSSA opted for Kitunda-Sinde area.
6. Lindi WSSA shall provide evidence to EWURA that it has designed and implementing a pro-active program of customer outreach. A status report on the implementation of that programme shall be included with all future applications for tariff adjustment and considered by EWURA in evaluating the reasonableness thereof; and	31st December 2012	0%	No evidence provided to show the implementation of customer outreach program
7. Lindi 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 Lindi 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 requests for tariff Adjustment	Continuous	25%	Lindi WSSA submitted the draft financial statement on time howver the MajIs reports and Annual reports were not submitted on time
Overall Performance	**7 conditions**	**25%**	

KIGOMA WSSA (Order № 11-019 of 16th December, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. Pay all its electricity debts	Continuous	100%	KUWASA is up to date in settling electricity bills after the approval of new tariff in December, 2011.
2. Kigoma WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA.	Continuous	50%	In MajIs, records are available for the whole of 2012/13 financial year. Had submitted Financial Statement for the 2012/13 financial year but has not submitted Annual Progress Report for the same period.
Overall Compliance	**2 Conditions**	**75%**	

SUMBAWANGA WSSA (Order № 11-001 of 23rd March 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. SUWASA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA. This information shall be used by EWURA to evaluate SUWASA's performance in comparison with other utilities and the improvement of its performance over time. This evaluation will he considered by EWURA in evaluating the reasonableness of all future requests for tariff adjustment.	Continuous	75%	MajIs reports and Draft Financial reports were submitted on time. However, Annual Report was submitted late
Overall Compliance	**1 Condition**	**75%**	

BABATI WSSA (Order № 10-009 of June, 2010)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th June 2010, Babati WSSA shall submit to EWURA its plan to reduce Non Revenue Water (NRW) from an average of 35% as of December 2009 to less than 20% by 2015;	30th June 2015	0%	According with the Plan for year 2012/13 Babati WSSA is required to reduce NRW to an average of 30.5%. NRW reported as of June 2013 NRW of 37.05%.
2. Babati WSSA shall continue to provide EWURA with information about its financial and operating condition in accordance with the requirements of EWURA.	Continuous	100%	Babati WSSA has continued to provide reports and information as required and compliant to the deadlines,
Overall Performance	**2 Conditions**	**50%**	

DAWASA (Order № 11-106 of 1st July, 2011)

Condition	Due date	Compliance Evaluation	Remarks
1. On or before 30th June 2013, DAWASA shall establish the correct level of service coverage.	30th June 2013	0%	DAWASA had prepared terms of reference (TOR) for assignment. However, in the course of starting the procurement process, DAWASA learnt that Millennium, Challenge Account (MCA-T) was carrying out a similar assignment but with a limited scope only covering areas served by Lower Ruvu Treatment Plant. To avoid duplication of efforts DAWASA requested MCA-T, who had already set aside funding for the assignment, to expand its scope to cover the whole DAWASA service area. This shift delayed the implementation of the EWURA condition. Further during inspection conducted by EWURA, DAWASA reported that MCC will no longer support the Service Level Coverage study as it was earlier requested as such this will be funded internally by DAWASA, ToR for the said study have already been prepared.
2. On or before 31st July, 2012, DAWASA shall ensure that all water customers are billed according to the water consumption indicated by meter readings. In case of a faulty meter, a customer shall be billed according to the assessed average water consumption based on previous meter readings.	31st July, 2012,	0%	As of June 2013 about 98% of customers in the DAWASA service area were metered and are billed according to actual water consumption. Metering exercise is still ongoing to ensure all unmetered customers are metered by 31 December 2013.
3. On or before 31st September 2012, DAWASA shall submit a status report on the implementation of customer outreach programme, which shall include a dissemination of Codes Practice. A status report on the implementation of that programme shall be included in all future Applications for tariff and charges adjustments and considered by EWURA in evaluating the reasonableness thereof.	31st September 2012	0%	DAWASA and DAWASCO jointly submitted a draft communication strategy which encompasses among other things the customer outreach programme and raising customer awareness in safeguarding the water infrastructures

Condition	Due date	Compliance Evaluation	Remarks
4. DAWASA 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 DAWASA'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 requests for tariff adjustment. In particular, DAWASA shall ensure that the accuracy of information provided in monthly reports through Water Supply Services Information System (MaJIs) is improved	Continuous	23.3%	DAWASA complied on the use of MajIs a new system provided by EWURA effectively from January 2013. DAWASCO submitted only 7 monthly MajIs report. The draft financial statement was submitted late
5. DAWASA shall on quarterly basis starting from 1st July, 2012 submit a status report to EWURA on operations of all DAWASA owned boreholes in accordance with the requirements of EWURA.	continuous	29.2%	DAWASA has submitted the report on the operations of all owned boreholes to EWURA only once
Overall Performance	**5 conditions**	**10.5%**	

Table A3.3: 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	
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 in time	100%
If implementation is ongoing	50%
If not implemented	0%
If fully implemented but delayed	75%

Table A3.4: Lease contract key performance targets (subject to financial penalties for non-compliance)

No.	Key Performance Target	Units	Performance Targets for 2012/13	Actual Performance for July 12 to June 13	Remarks
1a.	Drinking Water Quality Leaving Water Treatment Plant & Borehole source	%	95 95	96 89	Passed lease contract guidelines Boreholes failed on conductivity and pH
1b.	Drinking Water Quality in Distribution	%	95	96	Passed lease contract guidelines
2.	Effluent Quality	%	95	88	Excludes BOD_5, COD, and TSS which failed consistently.
3.	Metering Ratio	No.	100%	97.17%	The remaining unmetered customers have not been located and some are in difficult locations
4.	New Water Supply Customers	No.	5,000	5,898	Passed lease contract guidelines. New connections, regularized and registration of unregistered and uncaptured accounts
5.	Transmission main losses	%	16%	Estimated at 20%	Lugalo, Kerege 1 & 2, Tegeta, Salasala 1, 2, 3etc 54''pipes replaced. Leaks on mains pipes yet to be replaced Chamangwe 1&2,Kwa Yona, Sunguvuni, Bunju A, and Kawawa road, ARU, Mlalakua Bridge.
6.	Water Distribution Losses	%	14%	Estimated at 28%	Impeded by late commissioning of DMAs, business units boundaries yet to be aligned with proposed DMAs
7.	Collection Efficiency	MTsh/ month	3,264	3,362	Defective customer meters and meter under registration.
8a.	Service Pipe Repairs and mains up to and including 100mm diameter	hours	12	12	Good, condition of the service pipe and extensive connections amounts to big number of leaks within this class of pipes.
	Service pipe repairs and mains above 100mm up to 300mm	hours	18	18	Excellent performance mains in the City Centre and on surfaced roads take more time to get road opening permits from City Authorities.
	Mains repaired above 300mm up to and including 600mm	hours	48	48	Excellent performance.
	Mains repaired above 600mm in diameter.	hours	48	48	Good performance. Complications in coupling pre-stressed concrete pipes and steel parts on L/Ruvu transmission main delayed the repairs
8b.	Repair Time for background losses for service mains up to and including 100mm diameter	hours	48	48	Leaks have some delays necessitated by road opening permits from City authorities.
9.	Data Collection		Acquire and report annual data	On Going	Data on Water and waste water quality, Water production, flow records, network information, pipe maintenance and repair, customer data reported
10.	Water supply service coverage	%	Transition value	64 (estimated)	Estimated to include customers mainly from areas receiving service
12.	Sewerage service coverage		Transition Vale	10 (estimated)	No expansion done

APPENDIX 4: EVALUATION OF COMPLIANCE WITH PERFORMANCE TARGETS SET IN THE MoU BETWEEN REGIONAL WSSA AND MINISTRY OF WATER

Table A4.1: Population living within area with water network and Water Quality Compliance

Utility	Category	Proportion of population living within the area with water network (%)			Water Quality Compliance (%) (E-coli and Turbidity)		
		MoU Target	WSSA' s Perfomance	Total Points	MoU Target	WSSA' s Perfomance	Total Points
Arusha	A	98	78.4	47	100	95.0	62
Dodoma	A	94	81.4	51	100	100.0	100
Iringa	A	98	95.8	70	100	93.8	59
Mbeya	A	98	96.8	71	100	85.5	44
Morogoro	A	97	90.0	62	99.95	86.5	46
Moshi	A	98	100.0	100	100	97.3	68
Mtwara	A	90	87.6	59	99.5	82.7	41
Musoma	A	70	82.0	77	95	49.1	0
Mwanza	A	98	93.9	67	97.5	99.7	99
Shinyanga	A	82	58.5	25	100	96.3	66
Songea	A	88	64.2	31	99.5	100.0	100
Tabora	A	90	76.9	46	97.5	92.5	56
Tanga	A	96	99.4	99	99.25	97.8	69
Bukoba	B	80	76.3	45	100	85.9	45
Kigoma	B	75	70.7	39	100	79.3	37
Singida	B	84	88.4	85	100	97.5	69
Sumbawanga	B	92	36.7	0	99	76.6	34
Babati	C	85	84.4	55	99.5	97.0	67
Lindi	C	70	70.3	63	97.5	99.8	99
Maximum Achieved Value		**100.0**			**100.0**		
Average Achieved Value		**80.6**			**90.1**		
Minimum Achieved Value		**36.7**			**49.1**		

Table A4.2: Metering Ratio and Non-Revenue Water

Utility	Category	Metering Ratio (%)			Non-Revenue Water (%)		
		MoU Target	WSSA' s Perfomance	Total Points	MoU Target	WSSA' s Perfomance	Total Points
Arusha	A	100	100	100	28.0	40.6	37
Dodoma	A	100	100	100	32.0	34.1	53
Iringa	A	100	100	100	32.0	46.5	20
Mbeya	A	100	99	69	27.0	35.2	51
Morogoro	A	97	99	96	25.0	22.9	98
Moshi	A	100	100	100	23.0	28.4	64
Mtwara	A	100	100	100	24.0	41.4	34
Musoma	A	75	72	5	40.0	45.3	23
Mwanza	A	100	100	100	25.0	40.7	36
Shinyanga	A	100	100	100	23.0	22.0	100
Songea	A	95	91	44	23.0	26.9	66
Tabora	A	100	100	100	24.0	32.7	56
Tanga	A	100	100	100	24.8	25.9	68
Bukoba	B	95	91	45	42.0	53.4	0
Kigoma	B	80	99	96	25.0	33.5	54
Singida	B	100	88	38	21.0	30.0	61
Sumbawanga	B	95	75	12	32.0	39.7	39
Babati	C	100	100	100	30.5	37.1	47
Lindi	C	90	69	0	31.0	47.4	17
Maximum Achieved Value		**100**			**22.0**		
Average Achieved Value		**94**			**36.0**		
Minimum Achieved Value		**69.22**			**53.4**		

Table A4.3: Working Ratio and Personnel/1000 Connections

Utility	Category	Working Ratio			Personnel/1000 (W&S) connections		
		MoU Target	WSSA' s Perfomance	Total Points	MoU Target	WSSA' s Perfomance	Total Points
Arusha	A	0.86	0.77	100	5.0	5.1	74
Dodoma	A	0.95	0.88	88	7.0	7.3	57
Iringa	A	0.82	0.93	59	7.0	6.0	91
Mbeya	A	0.90	0.90	61	7.0	6.3	90
Morogoro	A	0.90	0.93	58	6.5	6.5	63
Moshi	A	0.81	0.85	66	7.0	6.8	86
Mtwara	A	0.70	1.10	43	6.0	7.5	55
Musoma	A	0.95	1.06	46	7.0	8.0	51
Mwanza	A	0.57	0.93	58	7.0	6.2	90
Shinyanga	A	1.00	0.91	86	9.0	5.1	99
Songea	A	0.97	1.23	33	6.0	4.9	100
Tabora	A	0.90	0.86	91	8.0	7.7	79
Tanga	A	0.72	0.83	69	5.2	5.0	99
Bukoba	B	0.90	1.00	51	9.0	8.2	75
Kigoma	B	1.10	1.17	38	8.0	7.8	77
Singida	B	1.00	1.17	38	8.0	12.8	33
Sumbawanga	B	0.85	1.17	37	7.5	8.6	48
Babati	C	0.92	0.90	87	12.0	12.9	33
Lindi	C	0.90	1.65	0	11.0	21.8	0
Maximum Achieved Value			**0.77**	**100**		**4.9**	
Average Achieved Value			**1.01**	**52**		**8.1**	
Minimum Achieved Value			**1.65**	**0**		**21.8**	

Table A4.4: Sewerage Indicators

Utility	Category	Proportion of population connected with sewerage network (%)			Wastewater quality compliance (%) (BOD and COD)		
		MoU Target	WSSA' s Perfomance	Total Points	MoU Target	WSSA' s Perfomance	Total Points
Arusha	A	15.0	7.6	28	50.0	0.0	0
Dodoma	A	23.0	14.0	54	100.0	75.0	64
Iringa	A	12.0	16.7	83	100.0	24.0	26
Mbeya	A	12.0	9.5	41	100.0	75.0	64
Morogoro	A	5.0	3.4	0	95.0	32.3	35
Moshi	A	29.0	29.0	100	99.0	100.0	100
Mtwara	A						0
Musoma	A						0
Mwanza	A	35.8	4.1	5	97.0	50.0	52
Shinyanga	A			3			0
Songea	A	9.3	7.7	29	94.0	100.0	100
Tabora	A	7.0	7.1	50	100.0	0.0	0
Tanga	A	9.3	9.4	65	0.0	0.0	0
Bukoba	B			3			25
Kigoma	B			3			25
Singida	B			3			25
Sumbawanga	B			3			25
Babati	C			3			25
Lindi	C			3			25
Maximum Achieved Value			**29.0**	**100**		**100.0**	**100**
Average Achieved Value			**10.8**	**8**		**45.6**	**21**
Minimum Achieved Value			**3.4**	**0**		**0.0**	**0**

Energy and Water Utilities Regulatory Authority
6th Floor, Harbour View Towers, Samora Avenue/Mission Street, P O Box 72175, Dar es Salaam, Tanzania
Tel: +255 (0) 22 212 3850/3/4, 2123856; Fax: +255 (0) 22 212 3180, E-mail: info@ewura.go.tz, Website: www.ewura.go.tz