THE UNITED REPUBLIC OF TANZANIA

ewura

Energy and Water Utilities Regulatory Authority

WATER UTILITIES PERFORMANCE REPORT FOR

2009/10

DISTRICT, SMALL TOWNS AND NATIONAL PROJECTS WATER UTILITIES

May 2011

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FOREWORD

This is the fifth year of operation of the Energy and Water Utilities Regulatory Authority (EWURA) and it is my pleasure to present the second report on the performance review of the Water Supply and Sanitation Authorities (WSSAs) at the District, Small Town and National Project levels in Tanzania for the year 2009/10. This is also in compliance with section 28(1) of the Water Supply and Sanitation Act, 2009, which requires EWURA to do the performance comparative analysis of all water authorities.

The report covers the comparative performance of autonomous District, Small Towns and National Projects water supply and sanitation authorities. The report has revealed continual improvement of service delivery by water utilities in terms of increase in the customer base and service coverage but more emphasis has to be directed to the following aspects which have generally shown an unsatisfactory trend:

- a substantial investment in developing water sources, which currently serves only 55% of the water demand;
- utilities are confronted by insufficient qualified staff; and
- most utilities are too small to operate commercially.

Besides the above requirements, utilities are confronted by inadequate manpower capacity, and twenty -three (23) utilities have no operational water boards.

In conclusion, EWURA believes that Water Utilities, the Government and Developing partners will use this report to identify areas of interventions in order to improve water service delivery.

Lastly, I sincerely wish to thank the Ministry of Water, EWURA Board of Directors, Government Consultative Council, Consumer Consultative Council, Regulated Water Utilities and staff members for their continued support and co-operation they offered in the course of performing EWURA's regulatory functions in the water sector in the year 2009/2010.

Haruna Masebu
DIRECTOR GENERAL
May, 2011

ABBREVIATIONS AND ACRONYMS

EWURA	Energy and Water Utilities Regulatory Authority
KASHWASA	Kahama Shinyanga Water Supply Authority
Mill.	Millions
MoW	Ministry of Water
NBS	National Bureau of Statistics
NRW	Non-revenue Water
TBS	Tanzania Bureau of Standards
WSSA	Water Supply and Sanitation Authority
WSDP	Water Sector Development Programme

Measurement Units and Symbols

cfu/100ml	colony forming units per 100 millilitres
km	kilometre
km^2	square kilometre
kWh/m^3	Kilowatts hour per cubic metre
m	metre
m^3	cubic metre
m^3/day	cubic metre per day
nr/km	number per kilometre
%	per cent
TZS	Tanzania Shillings

DEFINITIONS OF KEY PERFORMANCE INDICATORS

NO.	INDICATOR	DEFINITION	UNIT
WATER SUPPLY			
1	Average hours of supply.	Service hours of water supply are defined as the hours per day a consumer can draw drinking water from the tap at his/her household connection or the public stand pipe. These numbers of hours are not necessarily identical with the operation time of treatment plants or wells, as tanks, part of the distribution system, are used for storage. The target is 18 hours for Category C authorities.	Hours
2	Metering ratio	The number of connections that have operating meters as a percentage of the total number of connections. The target is 80% for category **C**.	(%)
3	Non- Revenue Water (NRW)	NRW is the amount of water that the licensee produces (or purchases from other entities) minus the amount that is sold to consumers or distributed for free (e.g. Firefighters), presented as a percentage of water produced or as an amount per length of the distribution system. NRW can be the result of physical (e.g. leaks, overflow) and commercial losses (e.g. illegal connections, collection of revenue). The recommended value is less than 20%.	(%)
4	Revenue collection efficiency	This indicator measures the ratio of collection to billings during the year = Amount Collected /Amount billed x 100.	(%)
5	Staff per 1000 connections	This indicator measures the staffing level, it is defined as the ratio of total employees to the total active water and sewerage connections/1000.	Number

EXECUTIVE SUMMARY

This report provides the assessment of the performance of District, Small Towns and National Water Projects, Water Supply and Sanitation Authorities for the year 2009/10 and individual utility performance profile. The assessment of performance for 2009/10 has been done for 84 District, Small Towns and National Project Water Supply and Sanitation Authorities (WSSAs), which submitted their reports out of a total of 109 District, Small town and National Project WSSAs of which only 88 are established with active boards. Performance data for 2009/10 has been compared with the performance data submitted in 2008/09 and data extracted from the Rapid Assessment report conducted in 2007/08.

Individual water utilities profiles and detailed water utilities comparative data have been appended to this report. Data and information in this report were derived from quarterly progress data submitted by utilities, submitted annual performance reports and rapid assessment report for township conducted in 2007/08.

ASSESMENT BASED ON KEY PERFORMANCE INDICATORS

The assessment of the performance for the 84 District, Small Towns WSSAs and National Water Projects was based on a few selected indicators owing to the non-availability of extensive realistic data. The indicators selected include: daily average per capita water consumption and demand, average hours of service, metering ratio, average staff per 1000 connections and Non-revenue water (NRW). The performance analysis has shown that water production is still very low as compared to water demand regarding which, on the average water production can only cover 50% in 2009/10 of water demand. The following are the general observations on the assessment of the performance of District, Small Towns and National Project's water utilities based on selected key performance indicators.

Water Production and Demand: The sufficiency of water production to satisfy the water demand and the relation between the two indicators, have been assessed by computing the average water production per capita per day and the water demand per capita per day. On average, daily water production per capita per day has increased from 32 litres/ capita/day in 2008/09 to 40 litres/capita/day in 2009/10. Meanwhile the average water demand per capita per day has increased from 77 litres/capita/day in 2008/2009 to 80 litres/capita per day. Two WSSAs

of Dakawa and Ushirombo reported the lowest average daily water production per capita of one litres/capita/day while the Monduli WSSA reported the highest of 236 litres/capita/day.

Hours of Service: The overall average hours of service for the District, Small Town and National Project WSSAs during the reporting period has slightly improved to 10.4 hours as compared to 9 hours reported in 2008/09. Only 6 WSSAs of Kahama, Kilolo, Ngudu, KASHWASA, Chalinze and Wangingombe had reported 24 hours of service. The utility with the lowest level of service is Kibondo with an average of only 1 hour of service per day while others ranged between 2 and 24 hours.

Metering: The overall metering ratio for the District WSSAs, Small Town WSSAs and National Water Projects has been reported to increase from 44% in 2008/09 to 47% in 2009/10. The utilities that have managed to meter all their customers are Handeni, Kahama, Korogwe, Misungwi, Mkuranga, Ngara, Nzega, Ushirombo, Isaka, KASHWASA, Chalinze and HTM. Metering ratio is still very low with the majority of the utilities having below 50% metering ratio.

Staff Productivity: In 2009/10, the overall average ratio of staff per 1000 connections for District WSSAs, Small Towns and National Projects WSSAs has improved to 35 staff per 1000 connections from 38 staff per 1000 connections reported in 2008/09. This high figure is due to the fact that the customer base for most of the District WSSAs, Small Towns and National Projects WSSAs is small. WSSAs with the highest ratio of staff per 1000 connections are Mkuranga and Ushirombo which reported above 150 staff per 1000 connections, while WSSAs of Tukuyu, Nansio and Muheza reported the lowest ratio of below 5 per 1000 connections

Non Revenue Water: The average Non-Revenue Water for the District, Small Towns and National Projects WSSAs has remained at 48% as in 2008/2009 with a number of utilities reporting higher NRW above 50%. These are Ilula, Kasulu, Katesh, Kyela, Makete, Masasi, Monduli, Sengerema, Tarime, Makonde, Maswa, HTM and Wangingombe. On the other hand, some utilities have reported NRW below 20% which are Handeni, Ifakara, Kahama, Mafinga, Mkuranga, Ushirombo, KASHWASA and Isaka

Revenue Collection and Expenditure: In 2009/10, a total of TZS 7.381 billion was collected from 84 District WSSAs, National Projects and Small Town WSSAs which has improved as

compared to TZS 6.016 collected in 2008/09. Meanwhile, the total expenditure has increased to TZS 10.6 billion from TZS 7.361billion reported in 2008/09. Kahama WSSA had the highest annual water sales collections of TZS 1.5billion while Mangaka had the lowest annual collections of TZS 1.4 million. The expenditure amounts included the subsidies from the Central Government and grants from the Local Governments. This signified that most of utilities could not meet their operational cost from their water sales and charges collections.

Water Boards: It was observed that some of the declared water authorities were not yet established with boards and management. By June, 2010, twenty three (23) utilities were still not operational due to the absence of water boards. These are Jomu/Tinde, Didia, Isikizya, Iselamagazi, Loliondo, Bashnet, Bonga, Chala, Dareda, Galapo, Laela, Maganzo, Mikumi, Lalago, Malampaka, Sangamwalugesha, Mlowo, Turiani, Longido, Dakawa-Mvomero, Sanya, Chalinze and Wangingombe WSSAs.

COMPLIANCE WITH REGULATORY OBLIGATIONS:

Licensing and Reporting: Up to June, 2010, a total of 88 District, Small Towns and National Projects WSSAs had applied for Provisional Licences out of the existing 109 utilities. They will be issued with licences in 2011/12 after publishing of Water and Sanitation Rules. During the reporting period, 84 utilities submitted their 2009/2010 annual performance reports, which is an improvement from 67 utilities which submitted their annual performance reports in the year 2008/2009. Most of the utilities which did not submit their annual performance reports are those which are non operational due to lack of Board of Directors as well as Management staff.

Tariff Reviews: During the reporting period, EWURA received tariff review application from 9 District and Small Towns Water Utilities, with most of the utilities applying for approval of their existing tariff. All the applications were processed with no one rejected.

CONCLUSION AND RECOMMENDATIONS

The performance of District, Small Towns and National Projects for 2009/10 was still unsatisfactory with a lot of challenges and problems which required appropriate interventions. The following are the recommendations:

i. District, Small Town and National Project WSSAs needed substantial investment in developing water sources, water infrastructures and capacity building.

ii. District, Small Town and National Project WSSAs have to be assisted by the MoW and respective Council in employing sufficient and qualified staff.

iii. Most District and Small Town WSSAs were too small to operate commercially. It was recommended to implement clustering as envisaged in the Water Supply and Sanitation Act, 2009.

iv. MOW, in collaboration with the Local Governments authorities have to establish water boards and management in non-operational utilities.

1.0 INTRODUCTION

This report provides the performance analysis of the District, Small Town and National Project WSSAs for the year 2009/10. A comprehensive baseline performance data for utilities that were compiled in 2007/2008 through rapid assessment have been updated with data from the water utilities for year 2009/10.

WSSAs are autonomous public water utilities established by the then Waterworks Act, Cap.272 of the Laws of Tanzania, which was repealed by the Water Supply and Sanitation Act, 2009. Notwithstanding the repealed Waterworks Act, section 60 of the Water Supply and Sanitation Act, 2009, recognizes all water authorities or entities which were established before its enactment.

1.1 Organizational set-up of WSSAs

According to the Water Supply and Sanitation Act, 2009, the provision of water supply and sanitation services in any declared water utility service area is carried out by financially and administrative autonomous WSSAs. These are mainly based at regional and district centers, small towns and national water projects.

On the basis of their financial capabilities, WSSAs have been graded into three categories, namely Category **A**, **B** and **C** WSSAs.

Category **A** utilities are capable of meeting all annual costs for Operation and Maintenance (O&M) including staff costs, energy costs and some contributions to investment. There are thirteen water utilities in this category and all are based at regional centres.

Category **B** utilities are capable of meeting their O&M costs including a part of the energy costs and staff costs. There are four utilities in this category and all are based at regional centres.

Category **C** utilities are capable of meeting a part of O&M costs and receive Government's subsidies to cover energy costs and salaries of the permanent staff. Utilities in Category **C** include two (2) regional centers, hundred (102) Districts and Small Towns and nine (7) National Projects.

1.2 Objective of the Report

The purpose of this report is to evaluate performance of 87 District, Small Towns and National Water Project WSSAs. The report aims at assisting WSSAs in identifying their strengths and weaknesses, and comparing their performance in order to uncover potential areas for improving performance.

The report also provides the MoW, Development Partners and other stakeholders an overview of the current status of water supply in the District, Small Towns and National Water Project WSSAs that will assist in the development of effective and efficient investment projects in the sector.

1.3 Methodology

Data and information for this report were derived from the quarterly progress data provided by the utilities, submitted Annual Performance Reports and Rapid Assessment Report for township conducted in 2007/08. Most of the data used in the preparation of this report are as reported by WSSA in their Annual Reports. Clarifications regarding data and information inconsistencies were sought through e-mails, telephone, site visit and filling in prepared profile sheets. It is important to note that not all methods were used regarding all WSSAs.

The input data for the selected performance indicators were mostly derived from basic data provided by WSSAs using the formulae as shown in the table for indicator definition. Microsoft excel program has been used to calculate indicators from the raw data received from the WSSAs.

1.4 Report Layout

The report consists of the following chapters:

Chapter one gives a brief introduction to the report which includes the purpose of the report, institutional set-up of commercial water utilities and the methodology used in the collection and compilation of data.

Chapter Two gives an overview of the overall performance of 84 District, Small Town and the National Water Project WSSAs during the 2009/10 year and compares with the performance for 2008/09. The performance is assessed using technical, commercial and financial selected indicators.

Chapter Three discusses the implementation of the regulatory obligations by the District, Small Town WSSAs and the National Water Projects.
Chapter Four gives the general conclusion and recommendations.

Appendix 1 gives the profiles of all 102 District, Small Town WSSAs and 7 National Water Projects which provide a snapshot of the performance of each utility.

Appendix 2 gives the summary of Key Performance Indicators.

Appendix 3 gives the summary of two years' performance for 2008/09 and 2009/10.

Appendix 4 gives Water Utilities Board Status and Implementation of Regulatory Obligations..

2.0 PERFORMANCE OVERVIEW

This chapter discusses the overall performance of 84 Districts, Small Town and the National Water Project WSSAs for the year 2009/10 in comparison to the performance for 2008/09. Due to non-availability of extensive and realistic data, few indicators and items have been selected to give a broad picture of the performance of the District, Small Town and the National Water Project WSSAs. The selected indicators include daily average per capita water production and demand, average hours of service, metering ratio, staff per 1000 connections, NRW and one item on revenue collection.

2.1 Water Production and Demand

2.1.1 Daily Water Production per Capita.

Average daily water production per capita is obtained by dividing the total annual water production for a utility by the total population in the service area and the number of days in a year. The daily water production per capita indicates the adequacy of water produced. The average daily water production per capita for 84 Districts, Small Town and National Project WSSAs is presented in **Table A3** of **Appendix 3** and is illustrated in **figure 2.1** below.

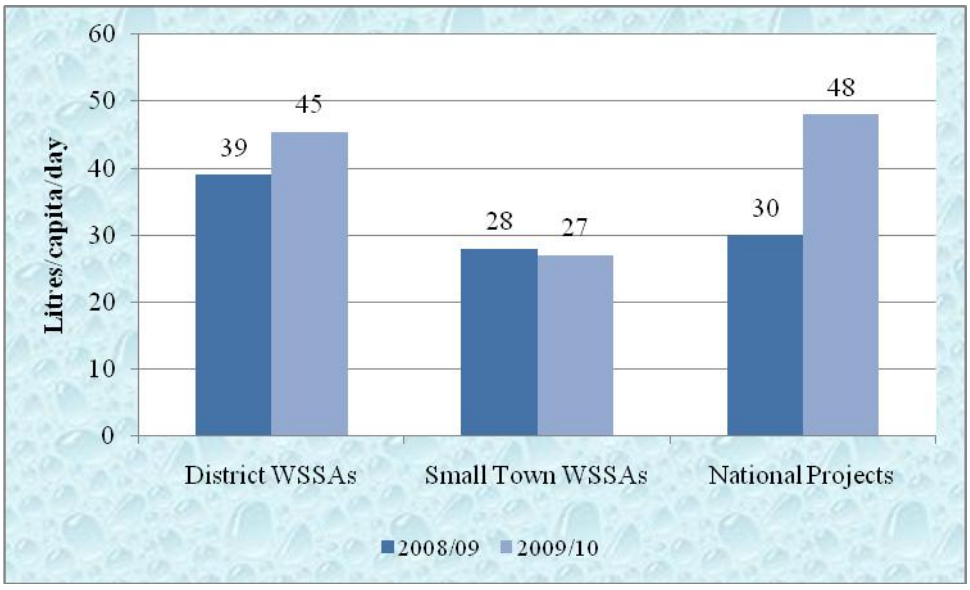

Figure 2.1: Average Daily Production per capita per day

On average daily water production per capita has increased from 32 litres/ capita/day in 2008/09 to 40 litres/capita/day in 2009/10 (Table A3) which is mainly the result of the increase

in water production per capita in the National Projects (Fig 2.1). The average daily water production per capita for the District, Small Towns and National Project WSSAs is less than the recommended minimum water consumption of 70 litres/ per capita /day[1] for small and medium townships. Few Utilities that have reported to produce and meet the recommended minimum consumption of 70 litres/per capita /day are Itumba-Isongole, Kasulu, Katesh/Hanang, Kilwa Masoko, Kondoa, Kyela, Makete, Monduli, Nachingwea, Pangani, Rujewa, Tukuyu and Maswa.

2.1.2 Daily Water Demand per Capita

The performance of utilities in terms of water demand is based on the average daily water demand per capita. Average daily water demand per capita is obtained by dividing the total annual water demand for a utility by the total population in the service area and the number of days in a year. The comparison of the computed average daily water demand per capita to the computed average daily water production per capita is used to indicate the sufficiency of water production if it meets the water demand. The summary of results for the computed average daily water demand per capita is presented in **Table A3** of **Appendix 3** and is illustrated in **figure 2.2** below.

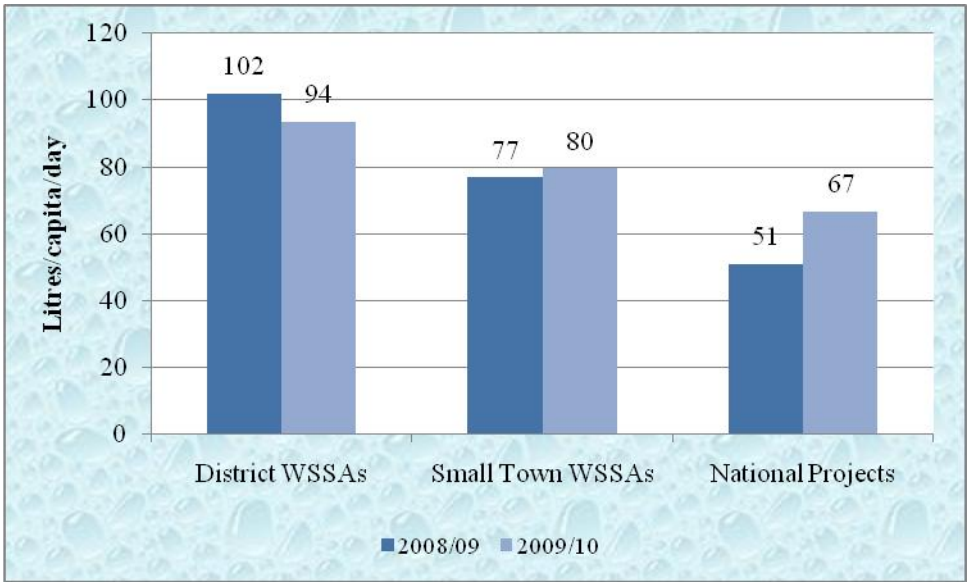

Figure 2.2 :Average water demand (litres per capita per day)

[1] MOW Design Manual

The overall average water demand per capita per day has been reported to increase from 77 litres/capita/day in 2008/09 to 80 litres/capita/day in 2009/10. The overall water demand per capita have shown a decreasing trend in the District WSSAs from 102 litres per capita reported in 2008/09 to 94 litres per capita while it has increased in the Small Town WSSAs and National Projects. The increase for the Small Towns was from 77 litres per capita reported in 2008/09 to 80 litres per capita in 2009/10, while, for the National Projects, the increase was from 51 litres per capita reported in 2008/09 to 67 litres per capita in 2009/10 However, the water demand data in most of these WSSAs are estimates which are not based on proper water demand studies.

The comparison of the computed average daily water production per capita to the computed average daily water demand per capita in 2009/10, as shown in **figure 2.3** below, indicates a wide gap between the actual water produced and water demand of the District and Small Towns WSSAs. Utilities with a large gap between the actual water produced and water demand are Bunda, Kibaya, Kiomboi, Kisarawe,Mahenge, Magu, Makete, Mpwapwa, Muheza, Mwanga, Nachingwea, Same, Gairo,Mbalizi and Mkuranga. On average, water production in the District, Small Towns and National project WSSAs is only 50% of the water demand. This shows the need for investment in the water production facilities to accommodate the demand.

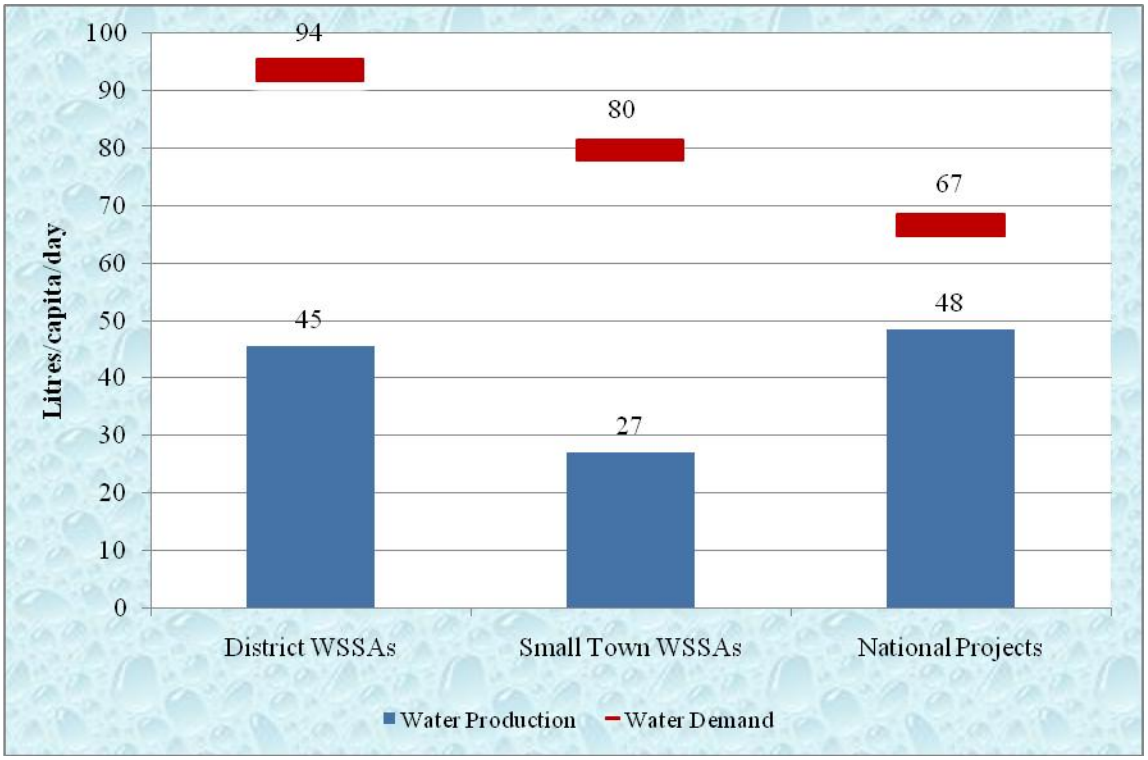

Figure 2.3: Water Production and Demand(litre/per capita/day)

2.1.3 Average Hours of Service

The average hours of service during the reporting period for the 84 utilities are indicated in **Table A**3 of **Appendix 3** and summarized in **figure 2.4** below. The overall average hours of service for the District, Small Towns and National Project WSSAs during the reporting period has slightly increased from 9 hours reported in 2008/09 to 10.4 hours in 2009/10. The data further indicate that only 6 WSSAs of Kahama, Kilolo, Ngudu, KASHWASA, Chalinze and Wangingombe had 24 hours of service. The utility with the lowest level of service hours was the Kibondo WSSA with only one hour a day while others ranged between 2 and 24 hours.

The overall average hours of the service for the National Projects and Small Towns were maintained at 16 hours and 6 hours respectively for both 2008/09 and 2009/10.

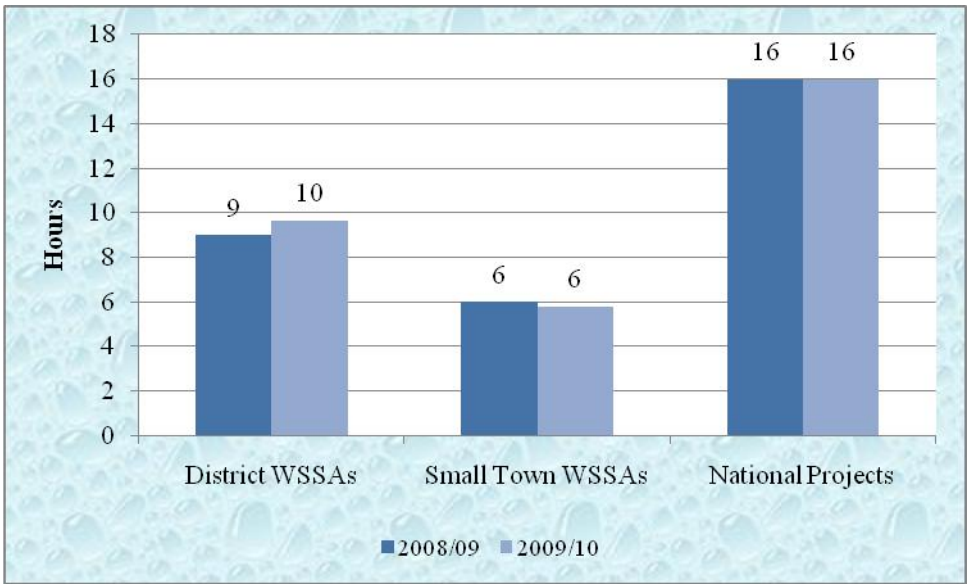

Figure No.2.4: Average Hours of Services

2.1.4 Metering Ratio

The metering ratio for the District, Small Towns and National Project WSSAs is shown in **Table A3** of **Appendix 3** and summarized in **figure 2.5** below. The overall metering ratio for the District WSSAs, Small Town WSSAs and National Water Projects has reportedly increased from 44% in 2008/09 to 47% in 2009/10. The utilities that have managed to meter all their customers are Handeni, Kahama, Korogwe, Misungwi, Mkuranga, Ngara, Nzega, Ushirombo,

Isaka, KASHWASA, Chalinze and HTM. For the National Projects water utilities, the metering ratio has slightly decreased from 62% achieved in 2008/09 to 61% in 2009/10. For the Small Towns WSSAs, the metering ratio is still very low but has increased from 29% reported in 2008/09 to 39% in 2009/10, whereas for District WSSAs, the metering ratio has increased from 40% achieved in 2008/09 to 44% in 2009/10.

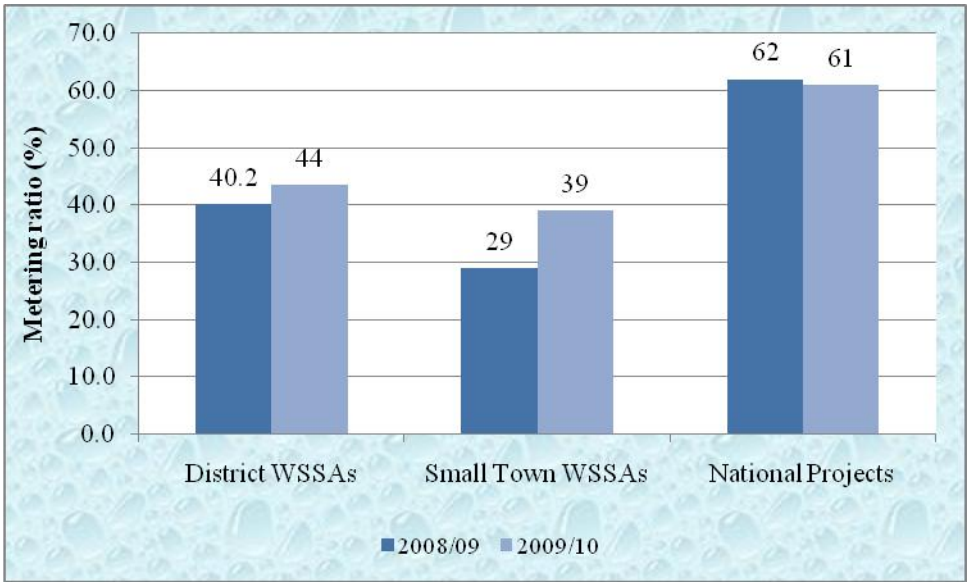

Figure 2.5: Metering Ratio

2.1.5 Staff per 1000 connections

The average staff per 1000 connections for the District WSSAs, Small Towns and National Projects WSSAs is as shown in **Table 3** of **Appendix 3** and illustrated in **figure 2.6** below. In 2009/10, the overall average ratio of staff per 1000 connection for the District WSSAs, Small Towns and National Projects WSSAs has improved to 35 staff per 1000 connections from 38 staff per 1000 connections reported in 2008/09. This figure is high owing to the fact that the customer base for most District WSSAs, Small Towns and National Projects WSSAs is small. WSSAs with the highest ratio of staff per 1000 connections are Mkuranga and Ushirombo which reported above 150 while the WSSAs of Tukuyu, Nansio and Muheza reported the lowest ratio of below 5 per 1000 connections.

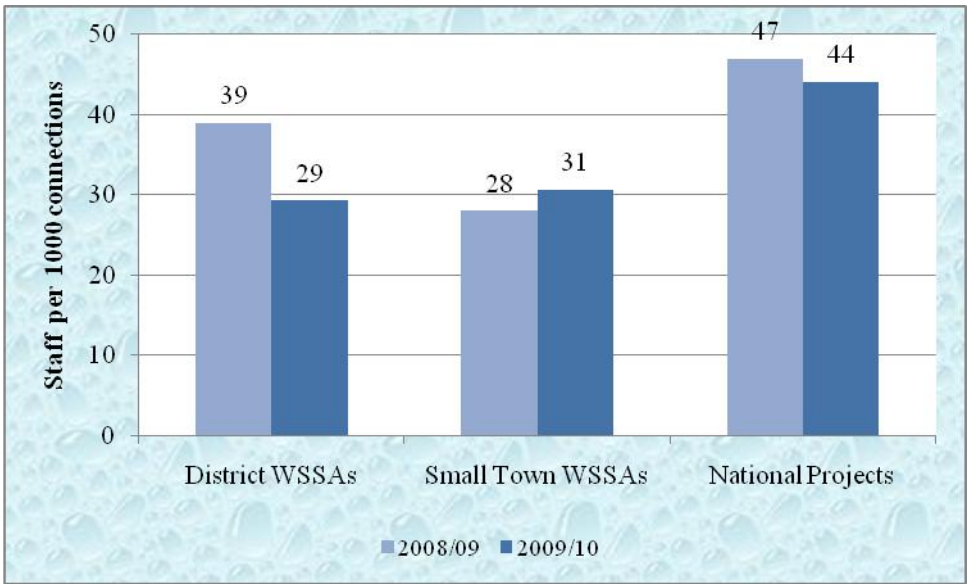

Figure 2.6: Average Staff per 1000 connections

2.1.6 Non-Revenue Water

NRW for the District WSSAs, Small Towns and National Projects WSSAs is as shown in **Table 3 of Appendix 3** and illustrated in **figure 2.7** below. In 2009/10, the overall average NRW for the District WSSAs, Small Towns and National Projects WSSAs has been maintained at 48% as reported in 2008/09. WSSAs with higher NRW above 50% are Ilula,Kasulu,Katesh,Kyela,Makete,Masasi,Monduli,Sengerema,Tarime,Makonde,Maswa,HTM and Wangingombe. WSSAs that have reported the lowest NRW below the best practice (20%) are Handeni, Ifakara, Kahama, Mafinga, Mkuranga, Ushirombo, KASHWASA and Isaka.

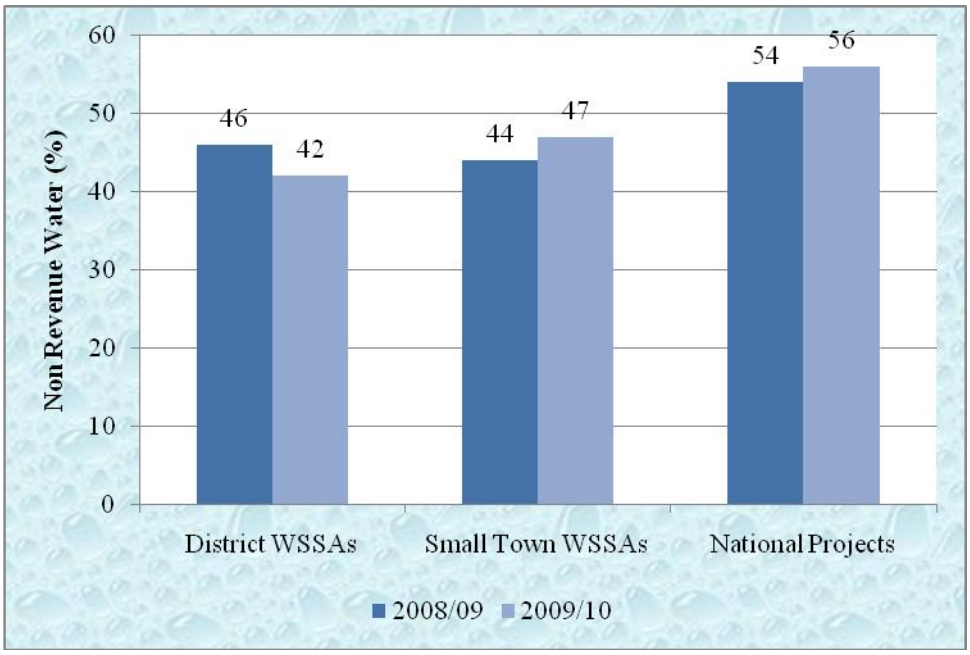

Figure 2.7: Non Revenue Water

2.1.7 Revenue Collection and Expenditure

In 2009/10, a total of TZS7.381 billion was collected from 84 District WSSAs, National Projects and Small Towns WSSAs which has improved compared to TZS 6.016 collected in 2008/09, while the total expenditure was increased to TZS 10.6 billion from TZS 7.361 reported in 2008/09. The Kahama WSSA had the highest annual water sales collections of TZS 1.5billion while Mangaka had the lowest annual collections of TZS 1.4 million. The expenditure included the Central Government subsidies and grants from the Local Government. This signified that most of utilities could not meet their operational cost from their water sales and charges collections.

2.1.8 Water Boards Status:

It was observed that some of the declared water authorities have no operational Boards of Directors and Management. By June, 2010, twenty-three (23) utilities did not have operational Boards of Directors and some Management staff; these are Jomu/Tinde, Didia, Isikizya, Iselamagazi, Loliondo, Bashnet, Bonga, Chala, Dareda, Galapo, Laela, Maganzo, Mikumi, Lalago, Malampaka, Sangamwalugesha, Mlowo, Turiani, Longido, Sanya, Chalinze and Wangingombe WSSAs. **Table 4** of **Appendix 4** depicts the status of the establishment of the WSSAs' Boards of Directors by the end of 2009/2010.

3.0 IMPLEMENTATION OF REGULATORY OBLIGATIONS

3.1 Licence Conditions and Requirements

Water utilities are required to obtain a licence from EWURA for them to operate legally. According to the Water Supply and Sanitation Act, 2009, which came into effect from August, 2009, water authorities are required to obtain a licence from EWURA after they have fully complied with the licensing conditions. Water authorities failing to comply with the licence conditions are granted a two-year provisional licence. Up to June, 2010, a total of 88 District, Small Towns and National Project WSSAs had applied and are eligible for Provisional Licences out of the existing 109 utilities. Not a single utility qualified for a Permanent Licence mainly owing to lack of autonomy in their operations (they didn't have their own staff, and some still operated with the local council's bank accounts). Most of the utilities have already applied for the provisional licences, which will be issued to eligible utilities during the year 2011/2012 after publication of the Water and Sanitation Rules. The detailed list of utilities that applied and are eligible for a Provisional Licence is shown in **Appendix 4.**

3.2 Tariff Review

During the period from June, 2009, to July, 2010, EWURA received tariff application from 9 District and Small Towns Water Utilities and appropriate tariffs were granted.

The Tariff review and applications during 2009/10 are as shown in Table No.3.1 below.

Table No.3.1: Tariff Review and Applications in 2009/2010

S/N	UWSA	Remarks
1	Ushirombo	Granted – Approving existing tariff
2	Nzega	Granted
3	Kilolo	Granted – Approving existing tariff
4	Vwawa	Granted – Approving existing tariff
5	Kasumulu	Granted – Approving existing tariff
6	Tunduma	Granted
7	Bunda	Granted
8	Biharamulo	Granted – Approving existing tariff
9	Muleba	Granted

3.3 Reporting Obligations

District, Small Town and National Project WSSAs have an obligation to submit the annual technical report, and draft financial statements latest by 30th September and their respective final reports latest by 31st December every year. During the reporting period, 84 utilities submitted their 2009/2010 annual performance reports, which is an improvement from 67 utilities which submitted their annual performance reports in the year 2008/2009. Improvement in annual report submissions is attributable to the training on reporting that was conducted by EWURA for all the District, Small Towns and National Project WSSAs and physical follow-up of some of the utilities. The details of the status of report submission are as shown in **Appendix 4**

4.0 GENERAL CONCLUSION AND RECOMMENDATIONS

4.1 General Conclusion

The overall performance of the District, Small towns and National Projects WSSAs is still unsatisfactory. The overall performance of the Districts, Small Towns and National Projects WSSAs, is still low. Improvement in water supply services is required through additions of new water sources and rehabilitations of the existing dilapidated infrastructure to meet the current demand. Most of the utilities have old and worn-out infrastructure, no bulk meters at their water production points, and low metering ratio.

Some common problems and challenges facing most utilities observed are insufficient and unqualified staff, insufficient water source, high operational cost, low tariff, working tools, equipment, office accommodation, and transport facilities. Also, there are no proper records of daily operations.

Twenty-three (23) utilities are not operational owing to the absence of water boards and management and also some of the utilities are still unable to compile regular reports to EWURA and MoW as per the provided format, these are summarized in **appendix 4.**

4.2 Recommendations

From the conclusion, the followings are recommended;

(i) District, Small Town and National Project WSSAs need substantial investment in developing water sources, water infrastructure and capacity building.

(ii) Most District and Small Town WSSAs are too small to operate commercially. It is recommended to implement clustering as envisaged in the Water Supply and Sanitation Act, 2009.

(iii) MoW, in collaboration with the Local Governments authorities have to establish water boards and management in non-operational utilities.

APPENDICES

Appendix 1

WATER UTILITIES PROFILES

Appendix 2

SUMMARY OF KEY PERFOMANCE INDICATORS

Appendix 3

SUMMARY OF PERFOMANCE INDICATORS (2008/09 and 2009/10)

Appendix 4:

WATER UTILITIES BOARD STATUS AND IMPLEMENTATION OF REGULATORY OBLIGATIONS

BARIADI **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Bariadi Urban Water Supply and Sewerage Authority (Bariadi-WSSA) was declared fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services within the Bariadi Urban area which is the headquarters of the Bariadi District, Shinyanga Region. Bariadi-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 53,232 out of which 10,870 persons are served. The utility draws water from four deep boreholes, with a total production capacity of $744m^3/day$ which is insufficient compared with the estimated water demand of $2{,}874m^3/day$. The average water produced in 2009/2010 was $317m^3/day$. The total length of the pipeline system is 18.3km. Water is supplied through rationing at an average of 12hrs. The system has 5 storage tanks with a storage capacity of $205m^3$. The township has no sewerage system; onsite sanitary facilities are in use under the Bariadi District Town Council. Bariadi-WSSA has 17 employees, out of which 4 are permanent, 6 temporary, 6 contract and 2 are daily paid. All 4 permanent staff` are employees of the District Council.

General Data About Water Utility

Total water connections	: 379
Total active connections	: 379
Total water kiosk/standpipe	: 7
Metering ratio	: 12%
NRW	: 47.5%
Total staff	: 17
Staff/1000 connections	: 45
Annual O&M costs	: Tzs 55,969,898
Annual water collections (Arrears included)	: Tzs 25,559,607
Annual water billings	: Tzs 20,675,050

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	450	650	750	-
Flat rate charge (**TZS/Month**)	5,500	12,000	15,750	-

Challenges

1. Low production capacity of existing boreholes.
2. Low metering ratio.
3. High NRW.
4. Drying out of the Bariadi dam.
5. Limited/Inadequate distribution system.

BIHARAMULO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Biharamulo Urban Water Supply and Sewerage Authority (BUWSA) was declared a fully autonomous public water utility in 2004 responsible for the overall operation and management of water supply and sanitation services within the Biharamulo Urban area which is the headquarters of the Biharamulo District, Kagera Region. BUWSA is classified as Category C water authority. Its area of responsibility has a total population of 18,000 people in which 11,000 people are currently served. The utility draws water from two water sources, namely Kagango and a Runyinya. The sources have altogether total installed production capacity of 515m^3/day .The present production capacity is insufficient compared with the estimated water demand of 1,260m^3/day. The total length of the pipeline system is 22.5km. Water is supplied through rationing at an average of 1.2 hrs. The system has 7 storage tanks with a combined capacity of 725m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Biharamulo District Town Council. BUWSA has 10 employees,16 contracted, and daily paid staff of different qualifications and professions.

General Data About Water Utility

Total water connections	: 627
Total active connections	: 608
Total water kiosk/standpipe	: 4
Metering ratio	: 54%
NRW	: 42.7%
Total staff	: 26
Staffs/1000 connection	: 41.5
Annual O&M costs	: Tzs 76,022,828
Annual water collections (Arrears included)	: Tzs 57,278,100
Annual water billings	: Tzs 62,259,500

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	800	1,000	1,000	NA
Flat rate charge (**TZS/Month**)	6,500	15,000	15,000	NA

Note: The charges at water Kiosks are TZS 30 per 20 litres jerrycan.

Challenges

1. Insufficient production capacity.
2. Inefficient staff to connections ratio.
3. Low metering ratio.
4. Low customer base

BUNDA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Bunda Urban Water Supply and Sanitation Authority (BUWSA) was declared a fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services within the Bunda urban area which is the headquarters of the Bunda District, Mara Region. BUWSA is classified as Category C water authority. Its area of responsibility has a total population of 83,769 people in which 22,403 people are currently served. The utility draws water from Lake Victoria, with a total installed production capacity of 1,260m^3/day .The present production capacity is low compared with the estimated water demand of 5,000m^3/day. The total length of the distribution system is 67 km and water is supplied through rationing at an average of 10 hrs. The system has 13 storage tanks with a combined capacity of 2,029.5m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Bunda District Town Council. BUWSA has 11 employees and 11 daily paid staff of different qualifications and professions.

General Data About Water Utility

Total water connections	:1,214
Total active connections	:924
Total water kiosk/standpipe	:27
Metering ratio	:67.5%
NRW	:47.5%
Total staff	:22
Staff/1000 connection	:18.1
Annual O&M Costs	:Tzs 202,163,103
Annual Water Collections (Arrears included)	: Tzs 70,800,412
Annual Water Billings	: Tzs 83,424,613

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	800	1,200	1,200	-
Flat rate charge (**TZS/Month**)	7,000	30,000	15,000	-

Note: The Charges at water Kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Insufficient production capacity
2. Low metering
3. High NRW
4. Inefficient staff to connection ratio.

CHAMWINO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Chamwino Urban Water Supply and Sanitation Authority (CHAMWINO-WSSA) was declared a fully autonomous public water utility on 17th June, 2005, and the board became fully operational by 24th November, 2008. CHAMWINO-WSSA is responsible for the overall operation and management of water supply and sanitation services within the urban area of Chamwino township which is the headquarters of the Chamwino District in Dodoma Region. CHAMWINO-WSSA is classified as Category C water authority. Its area of responsibility has a total population of 29,340 people in which 19,210 people are served. The utility draws water from two productive boreholes, out of seven drilled boreholes. The present production capacity of 1,440m3/day is very low compared with the estimated water demand of 1,636m^3/day. The utility has no water treatment facilities, and also the water quality monitoring plan was not in place and no quality test is conducted. The total length of the distribution system is 47.8km and water is supplied at an average of 18 hrs/day. The system has seven storage tanks with the total capacity of 395 m^3 out of which six are functioning. The sanitation facilities in this town are mainly pit latrines with few septic tanks in use, under the monitoring of the Chamwino District Council.

General Data About Water Utility

Total water connections	: 872
Total active connections	: 709
Total water kiosk/standpipe	: 8
Metering ratio	: 32%
NRW	: 37.1%
Total staff	: 20
Staff/1000 connections	: 23
Annual O&M costs	: TShs. No Data
Annual Water collections (Arrears included)	: TShs. No Data
Annual Water billings	: TShs. No Data

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Big Institution**
Flat rate and Minimum charge: (Domestic 0 – 14m^3; Institution 0 – 28m^3, Commercial 0-28 m^3) (**TShs/Month**)	4,500	5,500	20,500
Metered customers (Domestic 15 – 28m^3; Institution 29 – 42m^3, Commercial29-42 m^3) (**TShs/m3**)	300	300	300
Metered customers (Domestic 29$m^3$and above; Institution 43m^3 and above, Commercial: 43m^3 and above) (**TShs/m3**)	600	600	600

Note: The charges at water Kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. High NRW. 2. Low production as compared with demand. 3. Low metering ratio.
4. Low network coverage including kiosks. 5. Rehabilitation and extension of the infrastructure is required

CHUNYA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Chunya Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services in the Chunya Town which is the headquarters of Chunya District in Mbeya Region. Chunya WSSA is classified as Category C water authority and started its operation in 2003. Its area of responsibility has a total population of 18,547 people in which 9,055 persons are served with water. The utility draws water from three boreholes, namely BH. 2566/2009, BH.533/2007 and BH 2567/2009. The average water production from the sources during the reporting period was 531m^3/day.

The source installed production capacity is 1,034m^3/day. The utility has no water treatment facilities as well as no water quality monitoring programme in place. The total length of the entire pipe network is 13.09km and water is supplied at an average of 4 hrs. The network has 4 storage tanks with different capacities of combined storage volume of 355m^3. The town has no sewerage system. Onsite sanitary facilities are in use under the supervision of the Chunya District Council. Chunya WSSA has 13 employees with a deficiency of 5 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 675
Total active connections	: 655
Total water kiosk/standpipe	: 5
Metering ratio	: 58%
NRW	: 35%
Total staff	: 13
Staff/1000 connections	: 19
Annual O&M costs	: TZS 72,656,584
Annual water collections (Arrears included)	: TZS 54,731,610
Annual water billings	: TZS 61,168,110

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**
Metered (**TZS/M^3**)	1,000	1,000	1,000
Flat rate (**TZS/Month**)	3000 - 6000	8,000	4,500

Kiosk tariff is at TZS 20 per 20 litre jerrycan.

Challenges

1. Low water production to meet the demand.
2. High Non revenue Water due to leakages and frequent breakdowns.
3. Lack of capital fund for expansion of water supply services.
4. Lack of sufficient and qualified staff.

DAKAWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Dakawa Urban Water Supply and Sanitation Authority Water Board was published as an Urban Water Authority on 17th of June, 2005 by Government Notice No. 353. The first board members were approved by MoW on 30th April, 2008, and were supposed to commence work on 12th May, 2008. During the reporting period, the utility did not have an operating board. The utility is responsible for overall provision of water within the urban area of Dakawa, the headquarters of the Mvomero District. Dakawa is located 35km from the Morogoro Municipality along the Morogoro - Dodoma Highway. Dakawa Urban Water and Sanitation Authority covers two wards namely Dakawa Sokoine East and Dakawa Sokoine West, these two wards comprise of about 11 sub-villages. Dakawa Urban Water and Sanitation Authority acquired borehole sources from formerly community based schemes at Wami Dakawa which includes the three boreholes. The boreholes are all located at the Wami Dakawa village and in accordance with the borehole completion reports; the total yield was 54m^3/hr. The Authority has a total of ten staff (The manager is the only staff with degree level). Other staff are employed under contract terms without proper education background. In general, even the manager is paid directly by the DED's office and so are other temporary staff. The utility has no water treatment facilities and all other operational plans are not in place. The sanitation facilities in this town are mainly pit latrines with few septic tanks in use, under the monitoring of the Mvomero District Council.

General Data About Water Utility

Total water connections	: 124
Total active connections	: 124
Total water kiosk/standpipe	: No Data
Metering ratio	: 0.8%
NRW	: 40%
Total staff	: 10
Staff/1000 connections	: 80
Annual O&M costs	: TShs. 1,800,000
Annual water collections (Arrears included)	: TShs. 3,020,000
Annual water billings	: TShs. No Data

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**
Metered customers (**TShs/m3**)	465	515	610
Flat rate (**TShs/month**)	7,000	7,000	7,000

Note: The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. Management should make efforts to facilitate new Board becoming operational. 2. Capacity building aspects should aim at provision of the necessary skills, tools and equipment for staff. 3. Steps should be taken to fence all its potential water sources and seek for title deeds and water rights. 4. Lack of enough metres. 5. Lack of office and other working tools. 6. Lack of funds for rehabilitation.

GEITA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Geita Urban Water Supply and Sewerage Authority (GEUWASA) was declared a fully autonomous public water utility in 2006, responsible for the overall operation and management of water supply and sanitation services within the Geita Urban area which is the headquarters of Geita District, Mwanza Region. GEUWASA is classified as Category C water authority. Its area of responsibility has a total population of 80,813 people in which 36,152 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 522.7m^3/day .The present production capacity is insufficient compared with the estimated water demand of 5,599.7m^3/day. The total length of the pipeline system is 16km. Water is supplied through rationing at an average of 6 hrs. The system has 8 storage tanks with a combined capacity of 685m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Geita District Town Council. GEUWASA has 5 employees and 6 temporary staff of different qualifications and professions.

General Data About Water Utility

Total water connections	: 172
Total active connections	: 160
Total water kiosk/standpipe	: 27
Metering ratio	: 55.8%
NRW	: 38%
Total staff	: 11
Staff/1000 connection	: 18.1
Annual O&M costs	: Tzs 34,155,942.9
Annual water collections (Arrears included)	: Tzs 11,193,385
Annual water billings	: Tzs 12,073,977

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	250	250	250	250
Flat rate charge (**TZS/Month**)	10,000	10,000	10,000	10,000

Note: The Charges at water Kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Insufficient water production capacity.
2. Inadequate water storage capacity
3. Low customer base
4. Low metering ratio.
5. High NRW
6. Insufficient revenue collection

HANDENI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Handeni Urban Water Supply and Sanitation Authority (HUWASA), declared a fully autonomous public water utility in 2003, is responsible for the overall operation and management of water supply and sanitation services within the Handeni urban area which is the headquarters of the Handeni District, Tanga Region. HUWASA is classified as Category C water utility. Its area of responsibility has a total population of 44,407 people in which 15,920 persons are served. The utility draws water from three types of sources which are 2 dams of Chanika and Kwenkambala, 2 boreholes of Mnazini and Nderema, and Pangani river through bulk supply from the Handeni Trunk Main Water Supply Authority. The three types of sources have combined installed production capacity of 1220m^3/day. The installed production capacity is not sufficient to meet the estimated demand for the township of 2186m^3/day. The total length of the distribution system is 37.442 km and water is supplied at an average of 15 hrs. There are 7 storage tanks which have combined storage volume of 720m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Handeni District Town Council. HUWASA has 9 employees and has a deficiency of 8 employees.

General Data About Water Utility

Total water connections	: 405
Total water kiosk/standpipe	: 59
Metering ratio	: 100%
NRW	: 13%
Total staff	: 9
Staff/1000 connections	: 19
Annual O&M costs	: Tzs 63,104,000
Annual water collections (Arrears included)	: Tzs 29,207,830
Annual water billings	: Tzs 40,000,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Kiosk**
Consumption charges (**TZS/M^3**)	1,250	1,500	2,000	1,500
Flat rate(**TZS/Month**)	11,200	11,200	11,200	1,500

Note: The charges at water Kiosks are TZS 30 per 20 litres jerrycan.

Challenges

1. Inadequate water sources and supply.
2. Capital fund for major rehabilitation of old and dilapidated distribution network
3. Lack of treatment plant.
4. Lack office building and transport for the authority.
5. Lack of sufficient and competent staff.

IFAKARA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Ifakara Urban Water Supply and Sanitation Authority (IFUWASA) was established by Act No. 8 of 1997. IFUWASA started its operations on 1st July, 2005, and is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Ifakara township which is the headquarters of the Kilombero District in Morogoro Region. IFUWASA is classified as Category C water authority. Its area of responsibility has a total population of 66,390 people in which 28,164 people are served. The utility draws water from only one type of water source comprising five boreholes which are fairly protected and equipped with submersible pumps which are operational for an average of 12 hours per day. The combined production capacity is approximately 1,392m3/day if the pumps were operational for 20 hours per day. This capacity is not fully utilized owing to the worn-out pipeline network and power interruptions. The current used production of 1,122m3/day is low compared with the estimated water demand of 1,600m^3/day. Water supply is supplemented by shallow wells drilled in most households although the water is not safe owing to the high water table. The utility has no water treatment facilities and also the water quality monitoring plan is not in place. The total length of the distribution system is 26.2km and water is supplied through rationing at an average of 3 hrs/day. The system has four storage tanks with total capacity of 540m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Kilombero District Council

General Data About Water Utility

Total water connections	: 593
Total active connections	: 588
Total water kiosk/standpipe	: 17
Metering ratio	: 0%
NRW	: 20%
Total staff	: 11
Staff/1000 connections	: 18.5
Annual O&M costs	: TShs. 25,032,000
Annual water collections (Arrears included)	: TShs. 30,641,400
Annual water billings	: TShs. 75,514,500

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Metered customers (**TShs/Month**)	Not yet set	Not yet set	Not yet set
Flat rate (**TShs/Month**)	4,000	6,000	12,000

Note: The charges at water Kiosks are TSHS. 10 per 20 litres jerrycan.

Challenges

1. Aged distribution system. 2. Lack of sufficiently qualified staff. 3. Lack of transport facilities. 4. Lack of working tools including communication. 5. Lack of customer meters (0% metering ratio). 6. electricity to one of the boreholes. 7. Low collection efficiency.

IGUNGA **PROFILE AS PER 2008/09 DATA**

General Description About the Utility

Igunga Urban Water Supply and Sewerage Authority (IGUWASA) was declared a fully autonomous public water utility in 1999, responsible for the overall operation and management of water supply and sanitation services within the Igunga Urban area which is the headquarters of the Igunga District, Tabora Region. IGUWASA is classified as Category C water authority. Its area of responsibility is estimated to have a total populations of 19,000 people out of which 8,740 persons are served. The utility draws water from the Bulenya earthfill dam. The dam has the production capacity of 4,149m^3/day which is sufficient compared with the estimated water demand of 1,500m^3/day, but owing to aging, leaks, lack of air and washout valves, and clogging of the pipes, water produced from the dam is only 704 m^3/day. The total length of the pipeline system is 12.18km. Water is supplied through rationing at an average of 13 hrs. The system has 4 storage tanks with a combined capacity of 405m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Igunga District Town Council. IGUWASA has 12 employees, 5 permanent and 7 on contract.

General Data About Water Utility

Total water connections	: 725
Total active connections	: 562
Total water kiosk/standpipe	: 7
Metering ratio	: 11%
NRW	: 29.58%
Total staff	: 11
Staff/1000 connections	: 19
Annual O&M costs	: Tzs 52,344,219.92
Annual water collections (Arrears included)	: Tzs 50,109,446.00
Annual water billings	: Tzs 55,677,162.22

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	600	800	900	1,000
Flat rate charge (**TZS/Month**)	6,000	48,500	36,000	210,000

Note: The charges at water kiosks are TZS 12 per 20 litres jerrycan.

Challenges

1. Low metering ratio causing water re sale by flat rate customers
2. Poor quality of water supplied due to lack of treatment plant
3. Low water production

ISIKIZYA	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Isikizya Urban Water Supply & Sewerage Authority (Isikizya-WSSA), was declared a fully autonomous public water utility in 2005, responsible for overall operation and management of water supply and sanitation services within the Isikizya township, Uyui District, Tabora Region. Isikizya-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 6,428. The water board and management for the water authority have not been established. People in the service area are getting water services through 10 shallow wells fitted with hand pumps, the yield of which could not be established; also, with respect to the name of the utility which was gazetted as Uyui Water Supply and Sewerage Authority, there is no town known as Uyui, rather Uyui refers to District with Isikizya as the name of the town and District Headquarters. The estimated water demand of the Isikizya township is 1,500m^3/day. These shallow wells are managed and operated by Water User Groups. There is no water supply infrastructure with the exception of shallow wells, although a project which is currently being implemented under the Local Government Development Grant, the upgrading of the Mwanaligi spring source, laying of 4.5*km* rising main, construction of 100m^3 concrete storage tank on a 6*m* riser, and laying of the distribution pipeline 6*km* have been completed.
General Data About Water Utility	No operational data has been established to date.
Tariff Structure	**NOTE:** The water tariff is *Tshs* 500-800 per month per household
Challenges	1. No operational Water Board and Authority in place. 2. With the exception of shallow wells, no water supply infrastructure in place. **3.** The water supplied from the shallow wells is of poor quality.

ITUMBA-ISONGOLE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Itumba-Isongole Urban Water Supply and Sanitation Authority, declared a fully autonomous public water utility in 2004, is responsible for the overall operation and management of water supply and sanitation services within the Itumba-Isongole Town which is the headquarters of the Ileje District, Mbeya Region. Itumba WSSA is classified as Category C water authority. Its area of responsibility has a total population of 13,984 people of which 9,089 persons are served with water. The utility draws water from three stream sources: Iyela stream, Ilumba stream and Itinginya stream. Water from these sources is abstracted by intake weirs constructed across the streams and gravitates to the town. The sources produced an average of 1,146m^3/day during the financial year 2009/10.

The combined installed production capacity is 1,134m^3/day .The present production capacity is sufficient to meet the estimated water demand of 980m^3/day. However, owing to high water losses and low yield of the Itinginya Stream the water production cannot meet the water demand. The utility has no water treatment facilities. The total length of the entire pipe network is 47.4 km and water is supplied through rationing at an average of 15 hrs. The network has 6 storage tanks with combined capacity of 465m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Ileje District Council. Itumba WSSA has 14 employees with a deficiency of 6 employees of different qualifications and professions. Ten (10) employees on temporary terms.

General Data About Water Utility

Total water connections	:970
Total active connections	:801
Total water kiosk/standpipe	:67
Metering ratio	:19%
NRW	:41%
Total staff	:14
Staff/1000 connections	:14
Annual O&M costs	: TZS 34,940,430
Annual water collections (Arrears included)	: TZS 20,173,790
Annual water billings	: TZS 29,622,306

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Kiosk**
Metered (**TZS/m^3**)	200	200	250	NA
Flat rate (**TZS/Month**)	3000	6000	6000	5000

Challenges

1. Lack of sufficient and qualified staff
2. Effectively utilizing the existing water production from Ilumba and Iyela to serve the Isongole area.
3. Low metering ratio.
4. Lack of capital fund for expansion of water supply services.
5. Lack of office building and transport.

KAHAMA **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Kahama Urban Water Supply and Sewerage Authority (KUWASA), was declared a fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services within the Kahama Urban area which is the headquarters of the Kahama District, Shinyanga Region. KUWASA is classified as Category C water authority. Its area of responsibility has a total population of 128,312 people in which 55,775 persons are served. Currently, the utility depends solely on the bulk water supply from KASHWASA through the 18,000m^3 reservoir following drying up of the Kahama dam. In 2009/2010, KUWASA received a total of 2,039,984m^3 equivalent to 5,589m^3/day which is insufficient compared with the estimated water demand of 9,000m^3/day. The total length of the pipeline system is 214km. Water is supplied through rationing at an average of 7 hrs. The system has 5 storage tanks with a combined capacity of 18,695m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Kahama Town Council. KUWASA has 42 employees, 10 permanent and 32 on contract.

General Data About Water Utility

Total water connections	: 7,485
Total active connections	:7,485
Total water kiosk/standpipe	: 21
Metering ratio	: 100%
NRW	: 14%
Total staff	: 42
Staff/1000 connections	: 5.6
Annual O&M costs	: Tzs 978,120,078.57
Annual water collections (Arrears included)	: Tzs 1,532,943,216
Annual water billings	: Tzs 1,010,344,229

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	300-350	350	500	600

Note: The charges at water kiosks are TZS 50 per 20 litres jerrycan.

Challenges

1. Lack of competent staff especially in billing section.
2. Illegal connections, vandalism.
3. Untimely settlement of water bills by customers causing accumulation of arrears.
4. Absence of water testing equipment.

KARAGWE **PROFILE AS PER 2008/09 DATA**

General Description About the Utility

Karagwe Urban Water Supply and Sanitation Authority (KAUWASA), was declared a fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services within the urban area of the Karagwe Town Council which is the headquarters of the Karagwe District in Kagera Region. KAUWASA is classified as Category C water authority. Its area of responsibility has a total population of 25,976 people in which 4,031 people are currently served. The utility draws water from two main water sources, Katooma Spring contributing about 57% of the daily water production and Omururongo Spring contributing the remaining 43%. The combined installed production capacity is 792m^3/day .The present production capacity is very low compared with the estimated water demand of 1250m^3/day. The utility has no water treatment facilities as well as water quality monitoring in place. The total length of the distribution system is 30.645 km (including 8.7km of the Omurushaka scheme which is not operating) and water is supplied through rationing at an average of 3 hrs. The system has 5 storage tanks, out of which only 2 are functioning. The functioning tanks have a storage capacity of 120m^3. The town has no sewerage system; presently, onsite sanitary facilities are in use under the Township Authority. KAUWASA has 9 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	:321
Total active connections	:321
Total water kiosk/standpipe	:10
Metering ratio	:98%
NRW	:41%
Total staff	:9
Staffs/1000 connection	:28
Annual O&M costs	:Tzs 87,480,718
Annual water collections (Arrears included)	:Tzs 74,705,514
Annual water billings	:Tzs 78,298,515

Tariff Structure

Category of customer	Domestic	Institutions	Commercial	Industrial
Consumption charge (TZS/m3)	800	1,000	1,000	NA
Flat rate charge (TZS/Month)	6,000	6,000	6,000	NA

Note: The charges at water kiosks are TZS 50 per 20 litres jerrycan.

Challenges

1. Age of the pipe network.
2. Inadequate water supply due to low water sources capacity.
3. High NRW.
4. Lack of adequate reliable transport.
5. Vandalism of pipes and fittings in some areas where the network is not functioning
6. Lack of sufficient and qualified staff.

KASULU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kasulu Urban Water Supply and Sewerage Authority (KUWSA), was declared a fully autonomous public water utility in 2003, responsible for the overall operation and management of water supply and sanitation services within the Kasulu Urban area which is the headquarters of the Kasulu District, Kigoma Region. KUWSA is classified as Category C water authority. Its area of responsibility has a total population of 44,545 people in which 32,785people are currently served. The utility draws water from three water sources, namely Nyanka Stream, Nyakatoke Stream and Misemo Stream. The sources have altogether total installed production capacity of 4,534.4m^3/day .The present production capacity is insufficient compared with the estimated water demand of 5,054m^3/day. The total length of the pipeline system is 8.611km. Water is supplied through rationing at an average of 15 hrs. The system has 3 storage tanks with a combined capacity of 452m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Kasulu District Council. KUWSA has 17 employees, 6 are permanent and 11 temporary staff of different qualifications and professions.

General Data About Water Utility

Total water connections	:2,382
Total active connections	:2,028
Total water kiosk/standpipe	:0
Metering ratio	:9.7%
NRW	:79.2%
Total staff	:17
Staffs/1000 connection	:7.1
Annual O&M costs	: Tzs 82,595,580
Annual water collections (Arrears included)	: Tzs 61,915,992
Annual water billings	:Tzs 74,413,935

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (TZS/m3)	250	350	450	NA
Flat rate charge (TZS/Month)	2,000	3,000-111,600	2,000-15,000	NA

Note: No Kiosk and therefore no tariff for Kiosk.

Challenges

1. The installed water production capacity is insufficient compared to the existing demand.
2. Nevertheless, turbid water produced does not receive any treatment
3. Environmental pollution of water source catchment areas by human activities.
4. Low metering
5. Insufficient storage capacity
6. High NRW
7.

KATESH **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Katesh Urban Water Supply and Sanitation Authority (KAWASA), was declared a fully autonomous public water utility in 2004, responsible for the overall operation and management of water supply and sanitation services within the Katesh urban area which is the headquarters of the Hanang District, Manyara Region. KAWASA is classified as Category C water authority. Its area of responsibility has a total population of 14,931 people in which 10,176 persons are served. The utility draws water from the gravity scheme, Hamiti streams, which receive water from the several springs originating from the Hanang hills. The installed production capacity is 3,217m^3/day .This is sufficient to meet the present estimated demand for the township which is 1,749m^3/day. The total length of the distribution system is 32.19 km and water is supplied through rationing at an average of 6 hrs. There is no treatment plant in place however,, water quality monitoring had been conducted on quarterly bases. The system has 5 storage tanks with combined total storage capacity of 585m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Katesh Town Authority. KAWASA has 10 employees and the total number of staff required has not been established.

General Data About Water Utility

Total water connections	: 1,245
Total active connections	: 1,184
Total water kiosk/standpipe	: 23
Metering ratio	: 12%
NRW	: 78.27%
Total staff	: 10
Staff/1000 connections	: 8
Annual O&M costs	: Tzs 57,693,550
Annual water collections (Arrears included)	: Tzs 54,693,550
Annual water billings	: Tzs 37,950,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Water Boozer**
Consumption charge (**TZS/m3**)	400	400	600	600
Flat rate **TZS/Month**	3,500	7,000	8,000	NA

Note: The charges at water kiosks are TZS 10 per 20 litres jerrycan.

Challenges

1. High NRW due to dilapidated pipe network and many unmetered customers.
2. Lack of water treatment facilities.
3. Unwillingness of customers to pay their water bills.
4. Lack of authority office building and transport.
5. Lack of sufficient and qualified staff.
6. Misuse of water for irrigations.

KIBAYA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kibaya Urban Water Supply and Sanitation Authority (KUWASA) was declared fully a autonomous public water utility in 2002 and came into operational in 2007, responsible for the overall operation and management of water supply and sanitation services in the Kibaya Town which is the headquarters of the Kiteto District, Manyara Region. KUWASA is classified as Category C water authority. Its area of responsibility has a total population of 15,656 people in which 10,960 persons are served. The utility draws water from 3 deep boreholes and the Engoitoktok spring source. The spring source contributes about 19% of the actual total water production. The combined installed production capacity is 426m^3/day .This is very low compared with the estimated water demand of 1400m^3/day. The utility has neither water treatment facilities nor water quality monitoring in place. The total length of the distribution system is 28.11 km and water is supplied at an average of 4 hrs. There are 6 water storage tanks with combined storage capacity 443.5m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Kiteto District Council. KUWASA has 16 employees with deficiency of 12 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 317
Total active connections	: 294
Total water kiosk/standpipe	: 15
Metering ratio	: 3%
NRW	: 40%
Total staff	: 16
Staff/1000 connections	: 50
Annual O&M costs	: Tzs 45,554,497
Annual water collections (Arrears included)	: Tzs 10,934,616
Annual water billings	: Tzs 12,260,616

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	1000	1000	1000	1000
Flat rate charge (**TZS/Month**)	3000	10,000	4000	NA

Note: The charges at water Kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Inadequate water sources and water supply to meet the demand.
2. Increase metering ratio.
3. Lack of office building and transport.
4. Lack of sufficient and qualified staff.

KIBONDO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kibondo Urban Water Supply & Sewerage Authority (Kibondo-WSSA) was declared a fully autonomous public water utility in 2004, responsible for overall operation and management of water supply and sanitation services within the Kibondo urban areas, Kibondo District, Kigoma Region. Kibondo-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 27,801 out of which 15,716 people are currently served. The utility draws water from one stream, five springs, and five boreholes, with a total production capacity of 1,200 m^3/day *and* average production of 167m^3/day, which is insufficient compared with the estimated town water demand of 982m^3/day. The total length of the distribution pipeline system is 30.5km. Water is supplied through rationing at an average of 1hour/day. The system has 7 storage tanks with a storage capacity of about 780m^3. The town has no sewerage system; presently, onsite sanitary facilities are in use under the Kibondo District Council. The utility is served by 30 employees, 7 are permanent while 23 are contracted.

General Data About Water Utility

Total water connections	: 660
Total active connections	: 590
Total water kiosk/standpipe	: 8
Metering ratio	: 18.6
NRW	: 23.8
Total staff	: 37
Staffs/1000 connection	: 56
Annual O&M costs	: Tzs33,218,500
Annual water collections (Arrears included)	: Tzs33,218,500
Annual water billings	: Tzs 54,501,600

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	850	850	850	NA
Flat rate charge (**TZS/Month**)	7,000	10,000	10,000	NA

NOTE: The charges at water kiosks are TZS 20 per 20 litres jerrycan

Challenges

1. Insufficient water production capacity.
2. Low customer base.
3. Inefficient staff to connection ratio.
4. Low metering ratio.

KILINDONI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kilindoni Urban Water Supply and Sanitation Authority (KIUWASSA) was declared a fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services within the urban area of the Kilindoni Town which is the headquarters of the Mafia District, Coast Region. KIUWASSA is classified as Category C water authority. Its area of responsibility has a total population of 14,401people in which 5,508 persons are served with water. The utility draws water from the Bomani spring and the Kilimahewa and Kigamboni boreholes. The combined installed production capacity is 522m^3/day .The present production of 217m^3/day is very low compared with the estimated water demand of 804 m^3/day. The utility has no water treatment facilities. The total length of the distribution system is 3.025 km and water is supplied through rationing at an average of 4 hrs. The system has 4 storage tanks with combined capacity of 140m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Township Authority. KIUWASSA has 9 staff.

General Data About Water Utility

Total water connections	: 217
Total water kiosk/standpipe	: 0
Metering ratio	: 0%
Total staff	: 9
Staff/1000 connections	: 41.5
Annual O&M costs	: Tzs 26,085,831.34
Annual water collections (Arrears included)	: Tzs 5,017,500
Annual water billings	: Tzs 6,000,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Flat rate charge (**TZS/Month**)	5000-15,000	10,000-80,000	10,000-12,000	NA

Note: The charges at water kiosks are TZS 100 per 20 litres jerrycan.

Challenges

1. Lack of treatment plant.
2. Unreliability of water sources.
3. Low network coverage.
4. Lack of sufficient and qualified staffs.

KILOLO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kilolo Urban Water Supply and Sanitation Authority (KIUWASA) was declared a fully autonomous public water utility in 2005 for provision of water supply and sanitation services within the Kilolo township area which is the headquarters of the Kilolo district in Iringa region. KIUWASA has a Board of directors and the day-to-day activities are managed by a Manager. KIUWASA is classified as Category C water authority and started its operation in 2009. Its area of responsibility has a total population of 23,087 people in which 14,314 persons are accessing water services provided by the utility. The total water demand for the town is estimated at 880m^3/day while water produced is estimated as 414m^3/day. The utility draws water from protected springs located in the Lusinga village about 25km from the town center. The water supply network is 40.3km long with six storage tanks of total capacity 357.5m^3.

The source installed production capacity is 440m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 880m^3/day. The utility has no water treatment facilities. Water is supplied for 24 hours. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Kilolo District Council. Kilolo WSSA has 8 employees with a staff per 1000 connections of 82.

General Data About Water Utility

Total water connections	: 97
Total water kiosk/standpipe	: 53
Metering ratio	: 10%
NRW	: 92%
Total staff	: 8
Staff per 1000 connections	: 82

Tariff Structure

Category of customer	Domestic	Institutions	Commercial	Industrial	Kiosk
Metered (**TZS/m^3**)	400 – 460	400 – 460	420 - 460	420 - 460	
Flat rate charge (**TZS/month**)	3,500 – 4,000	8,500 – 15,500	10,500 – 20,500	10,500 – 20,500	

Kiosk tariff is TZS 20 per 20 liters jerrycan

Challenges

1. Insufficient water production to meet the water demand
2. Lack of qualified and sufficient staff
3. Lack of office building and transport facilities

KILOSA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kilosa Urban Water Supply and Sanitation Authority (KILOSA-WSSA) was established by Act No. 8 of 1997 and was declared a water supply Authority in February, 2001. KILOSA-WSSA is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Kilosa township which is the headquarters of the Kilosa District, Morogoro Region. KILOSA-WSSA is classified as Category C water authority. Its area of responsibility has a total population of 26,658 based on the 2002 census, in which 14,928 people are served. The town water supply depends on the Mkadage river source contributing 80% of production, and two productive boreholes, located at the Manzese and Azimio areas, contributing the remaining 20%. There are also a few privately owned shallow wells. The Mkadage intake was constructed in 1952 and later rehabilitated in the late 70's. Water from the Mkadage intake is pumped into a 1000 m^3 storage tank located about 246m away. Water from Azimio boreholes, on the other hand, is pumped directly into the distribution system, while that from Manzese is pumped into 225m^3 storage tanks at the Manzese area. The present production capacity of 1,252 m^3/day is very low compared with the estimated water demand of 2,364m^3/day. The utility has no water treatment facilities except for chlorination done at the 1000m^3 storage tank receiving water from the Mkadage intake. The total length of the distribution system is 22.96km and water is supplied at an average of 18 hrs/day. The system has three storage tanks with total capacity of 1,360 m^3 that are functioning. The water supply authority has no sewerage network.

General Data About Water Utility

Total water connections	: 1,281
Total active connections	: 922
Total water kiosk/standpipe	: 1
Metering ratio	: 6%
NRW	: 30%
Total staff	: 21
Staff/1000 connections	: 16.4
Annual O&M costs	: TShs. 113,281,594
Annual water collections (Arrears included)	: TShs. 56,466,450
Annual water billings	: TShs. 47,546,600

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industries**
Metered customers (**TShs/m3**)	350	400 – 550	600	750
Flat rate (**TShs/month**)	5,000	10,000 – 75,000	6,000 – 30,000	20,000 – 80,000

Note1: Industries in this case included contractors

Note 2: The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. Lack of Transport facilities. 2. High NRW due to aged network. 3. Low production capacity as compared to the demand. 4. Low metering ratio. 5. Few number of kiosks and network coverage. 6. Treatment facilities. 7. Frequent breakdown of pumps. 8. Inadequate qualified staff.

KILWA MASOKO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kilwa Urban Water Supply and Sanitation Authority (KMUWASA) was established by Act No. 8 of 1997 and came into operation on 28th November, 2004. KMUWASA is responsible for the overall operation and management of water supply and sanitation services within the urban area of Masoko township which is the headquarters of the Kilwa District, Lindi Region. Its area of responsibility has a total population of 17,534 people in which 10,150 people are served. The utility draws water from two main types of water sources, six boreholes located at the Mkapa garden area at the centre of the Masoko township contributing the remaining 90% and the Mtanga spring located 11km from the Masoko township along the Masoko – Nangurukuru road which contributes about 10% of the daily water production. The combined production capacity is approximately 3,361m^3/day but it is not fully utilized owing to the worn out transmission line and non-working boreholes. The present annual production of 2,066m^3/day is very low compared with the estimated water demand of 2,466m^3/day. The utility has no water treatment facilities and also water quality is monitored by quality check done by the regional lab at Mtwara. The total length of the distribution system is 20.8km and water is supplied through rationing at an average of 20 hrs/day. The system has three storage tanks with total capacity of 317m^3, but only two tanks with total capacity of 227m^3 are functioning. The town has no sewerage system; onsite sanitation in use is under the monitoring of the Kilwa District Council

General Data About Water Utility

Total water connections	: 1,007
Total active connections	: nm
Total water kiosk/standpipe	: 7
Metering ratio	: 78%
NRW	: 24%
Total staff	: 25
Staff/1000 connections	: 24
Annual O&M costs	: TShs. 67,000,990
Annual water collections (Arrears included)	: TShs. 76,432,089
Annual water billings	: TShs. 146,581,248

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Metered customers (**TShs/Month**)	400	500	500
Flat rate (**TShs/Month**)	4,000	-	-

Note: The charges at water kiosks are TSHS. 10 per 20 litres jerrycan.

Challenges

1. Low production capacity. 2. High NRW caused by low metering.. 3. Low coverage of distribution network by almost 50%. 4. Lack of sufficient qualified staff (especially accounts section)

KIOMBOI **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Kiomboi Urban Water Supply and Sewerage Authority (KIUWASA) was declared a fully autonomous public water utility in 2005, responsible for the overall operation and management of water supply and sanitation services within the Kiomboi Urban area which is the headquarters of the Iramba District, Singida Region. KIUWASA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 12,480 out of which 9,360 people are served. The utility draws water from five operating boreholes out of the total 7 boreholes which exist. The total present production capacity from the boreholes is *1,202.4m^3/day* which is insufficient compared with the estimated water demand of 1,510*m^3/day*. In 2009/2010, an average of *276m^3/day* was produced. The total length of the distribution system is 11.6km. Water is supplied through rationing at an average of 3 hrs. The newly constructed storage tank has made the system to have 4 storage tanks with total storage capacity of 485m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Iramba District Town Council. KIUWASA has 14 employees, all permanent.

General Data About Water Utility

Total water connections	: 400
Total active connections	: 400
Total water kiosk/standpipe	: 20
Metering ratio	: 75%
NRW	: Not reported
Total staff	: 48%
Staff/1000 connections	: 35
Annual O&M costs	: Tzs 76,633,041.91
Annual water collections (Arrears included)	: Tzs 37,183,533
Annual water billings	:Not reported

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	600	600	600	NA
Flat rate charge (**TZS/Month**)	2,000	7,000	NA	NA

Note: The charges at water kiosks are TZS 50per 20 litres jerrycan.

Challenges

1. Old pumping units experiencing frequent breakdown.
2. Bill settlement, customers not paying in time.
3. Lack of transport.
4. Low coverage, only 16% of the town is covered/has network.
5. Low metering, only 15% of the customers are metered.
6. Failure to estimate NRW due to lack of bulk water metres.

KISARAWE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kisarawe Urban Water Supply and Sanitation Authority (KUWSA), was declared a fully autonomous public water utility in 2004, responsible for the overall operation and management of water supply and sanitation services within the Kisarawe urban area which is the headquarters of the Kisarawe District, Coast Region. KUWSA is classified as Category C water utility. Its area of responsibility has a total population of 10,592 people of which 7,054 persons are served. The utility draws water from two sources which are the Minaki and Dallu dams. The sources have combined installed production capacity of 516m^3/day. This is not sufficient to meet the estimated demand for the township of 3,600m^3/day. The Authority supplies water at an average of 6 hrs per day. There are 5 storage tanks which have combined storage volume of 539m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Kisarawe District Council. KUWSA has 13 employees.

General Data About Water Utility

Total water connections	: 215
Total water kiosk/standpipe	: 7
Metering ratio	: 0%
NRW	: 50%
Total staff	: 13
Staff/1000 connections	: 72
Annual O&M costs	: Tzs 33,391,776
Annual water collections (Arrears included)	: Tzs 9,544,100
Annual water billings	: Tzs 8,600,400

Tariff Structure

Category of customer	**Domestic**	**Institutio -nal**	**Commercial**	**Industrial**
Consumption charges (**TZS/M^3**)	Not set	Not set	Not set	Not set
Flat rate(**TZS/Month**)	2,800	8,000-200,000	5,000-10,000	NA

Note:

1. The charges at water kiosks are TZS 20 per 20 litres jerrycan.
2. The tariff for metered customers is not yet set as there are no metered customers

Challenges

1. High NRW.
2. Lack of treatment plant.
3. Lack of sufficient and competent staff.
4. Poor water quality.
5. Lack of office accommodation.

KISHAPU	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Kishapu Urban Water Supply & Sewerage Authority (Kishapu-WSSA) was declared a fully autonomous public water utility in 2006, responsible for overall operation and management of water supply and sanitation services within the Kishapu ward comprised 8 villages, Kishapu District, Shinyanga Region. Kishapu-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 18,054 out of which 9,511 people are currently served. However, since its establishment, it has never been under the management of the water board but under the water user association, and currently, under the District Water Engineer. The utility draws water from the Tungu River, with a total production capacity that has not been established. The system has 2 storage tanks with a storage capacity of about 120m^3. The ward has no sewerage system; presently, onsite sanitary facilities are in use under the Kishapu District Council. The utility is served by 3 employees, under the District Water Engineer.
General Data About Water Utility	Total water connections : 111 Total active connections : 111 Total water kiosk/standpipe : 7 Metering ratio : 98% Total staff : 3 Staffs/1000 connection : 28.3
Tariff Structure	The charges at water kiosks are TZS 30 per 20 litres jerrycan
Challenges	1. Unreliability of water sources and supply. 2. No management of the utility. 3. Power fluctuations problems. 4. Small distribution network.

KONDOA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kondoa Urban Water Supply and Sanitation Authority (Kondoa-WSSA) was established by Act No. 8 of 1997 and came into operation in November, 2004. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Kondoa township which is the headquarters of the Kondoa District, Dodoma Region. Its area of responsibility has an approximate total population of 27,759 people in which 24,255 people are served. The utility draws water from two main types of water sources, Chemchem spring contributing about 95% of the daily water production and two boreholes at the Bicha village (in which only one BH is operated) contributing the remaining 5%. The combined installed production capacity is approximately 3,284m^3/day which does not meet the daily demand of the Kondoa township and Bicha village of 4,500m3/day. This is due to inadequate production as a result of one unoperated Bicha borehole with low yield and also network coverage which needs extension. The utility has water quality monitoring plan and quality checks are done on quarterly basis. The total length of the distribution system is 52.43km and water is supplied through rationing at an average of 12 hrs/day. The utility has eight storage tanks with total capacity of 1,350m^3 of which seven tanks are working. The town has no sewerage system and onsite sanitation is monitored by the Kondoa District Council.

General Data About Water Utility

Total Water Connections	: 2,011
Total Active Connections	: 1,380
Total Water Kiosk/Standpipe	: 17
Metering Ratio	: 30%
NRW	: 35%
Total Staff	: 34
Staff/1000 connections	: 13.3
Annual O&M Costs	: TShs. 129,412,138
Annual Water Collections (Arrears included)	: TShs. 147,396,680
Annual Water Billings	: TShs. 117,540,604

Tariff Structure

Category of customer	Domestic	Institutions	Commercial
Cons: 1 – 50m3 (Domestic: 1 - 10m3) (**TShs/m3**)	500	600	600
Above 50m3 (Domestic: 11 – 25 and above 25m3) (**TShs/m3**)	600 & 650	650	650
Flat rate (**TShs/Month**)	6,000	15,000 – 240,000	25,000

Note:
i) The charges at water kiosks are TShs. 15 per 20 litres jerrycan.

Challenges

1. Inadequate network coverage, i.e. Maji ya Shamba and Tura areas. 2. Low metering ratio, currently 30%. 3. Increased waste water discharge thus requiring treatment. 4. Lack of working tools and transport. 5. Inadequate office space for all staff 6. Lack of adequate qualified personnel. 7. Low production as compared to the demand

KONGWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kongwa Urban Water Supply and Sanitation Authority (KUWASA) was established by Act No. 8 of 1997 and came into operation on 30th January, 2004. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Kongwa township which is the headquarters of the Kongwa District,Dodoma Region. Its area of responsibility, has an approximate total population of 16,244 people in which 7,550 persons are served with water. The utility draws water from two main types of water sources, Sagara hills spring (gravity scheme) contributing about 70% of the daily water production and three boreholes (of which only two are working) contributing the remaining 30%. The combined installed production capacity is approximately 1,152m^3/day which does not meet the daily demand of the Kongwa township approximated to 1,410 m^3/day together with four villages in the areas along the transmission line from the Sagara hills. The water produced is not fully utilized owing to the worn-out transmission line and breakdown of boreholes. The utility has no proper water quality monitoring plan and water treatment facilities. The total length of the distribution system is 38.3km, and water is supplied through rationing at an average of 8 hrs/day. The system has two storage tanks with total capacity of 335m^3. The town has no sewerage system and onsite sanitation is monitored by the Kongwa District Council.

General Data About Water Utility

Total water connections	: 925
Total active connections	: 320
Total water kiosk/standpipe	: 22
Metering ratio	: 42%
NRW	: 45%
Total staff	: 16
Staff/1000 connections	: 50
Annual O&M costs	: TShs. 77,108,932
Annual water collections (Arrears included)	: TShs. 61,159,341
Annual water billings	: TShs. 77,754,430

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Religious
Cons: 1 – 10m3 (Domestic: 1 -6m3) (TShs/Month)	5,000	10,000	10,000	10,000
Cons: 10 – 100m3 (Domestic: 6 - 15m3) (TShs/m3)	1,000	1,000	1,000	1,500
Cons: Exceeding limit above (TShs/m3)	1,200	2,000	2,000	1,500

Note:

i) The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. Lack of adequate qualified personnel. 2. Lack / shortage of working tools. 3. Poor quality of supplied water that requires treatment. 4. Aged water supply infrastructure. 5. Need for new water sources to meet the demand. 6. Lack of transport facilities

KOROGWE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Korogwe Urban Water Supply and Sanitation Authority (KUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Korogwe Town Council which is the headquarters of the Korogwe District in Tanga Region. KUWASA is classified as Category C water authority. Its area of responsibility has a total population of 62,028people of which 37,152 persons are served with water. The utility draws water from two main types of water sources, namely *Mbeza Stream (gravity scheme*) contributing about 52% of the daily water production, and three boreholes (*Kilole, Old Korogwe and Mtonga*) contributing the remaining 48%. The combined installed production capacity is 2,700m^3/day .The present production capacity is very low compared with the estimated water demand of 4,243 m^3/day. The utility has no water treatment facilities but water quality monitoring was conducted on quarterly bases. The total length of the distribution system is 45.286 km and water is supplied through rationing at an average of 7 hrs. The system has 6 storage tanks with combined capacity of 1755m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Township Authority. KUWASA has 18 employees with deficiency of 13 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 2,315
Total active connections	: 1,925
Total water kiosk/standpipe	: 38
Metering ratio	: 100%
NRW	: 38.6%
Total staff	: 18
Staff/1000 connections	: 7.7
Annual O&M costs	: Tzs 232,395,254
Annual water collections (Arrears included)	: Tzs 182,302,260
Annual water billings	: Tzs 170,743,760

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	400	400	400	400
Flat rate charge (**TZS/Month**)	2,800 to 4,800	5,600	5,600	5,600

Note: The charges at water kiosks are TZS 8 per 20 litres jerrycan.

Challenges

1 Age of the pipe network.
2 Unreliability of water sources.
3 Low network coverage.
4 Poor bacteriological quality of water from Mbeza stream.
5. Lack of water treatment plant at Mbeza River Source.
6. Lack of office building and transport.
7. Lack of sufficient and qualified staffs.

KYELA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kyela Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2004, responsible for the overall operation and management of water supply and sanitation services within the Kyela Town which is the headquarters of the Kyela District, Mbeya Region. Kyela WSSA is classified as Category C water authority which started its operation in 2005. Its area of responsibility has a total population of 44,905 people of which 41,316 persons are served with water. The main water source for the Kyela town is the Mambwe River (Kanga group gravity scheme) located in the Mbambo Village, Rungwe District, about 30km from Kyela town. Other water sources for the Kyela town are two boreholes (drilled in 2007) located at the Police area and Kyela District Hospital in the Kyela town. The sources produced an average of 4,090m^3/day during the financial year 2009/10.

The combined installed production capacity is 4,330m^3/day, while the estimated water demand for the Kyela town is 3,143 m^3/day. The present production capacity exceeds the estimated water demand for the Kyela town by 23%. However, this extra capacity is not available for the Kyela town since water from the Kanga group also serves other villages in the Rungwe district that are designated to be served by the scheme. The total length of the entire pipe network is 53.64 km and water is supplied at an average of 18 hrs. The network has 3 storage tanks with combined storage volume of 340m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Kyela District Council. Kyela WSSA has 21 employees with deficiency of 5 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 2,201
Total active connections	: 2,090
Total water kiosk/standpipe	: 68
Metering ratio	: 3%
NRW	: 55%
Total staff	: 21
Staff/1000 connections	: 10
Annual O&M costs	: TZS 47,812,420.81
Annual water collections (Arrears included)	: TZS 74,920,800
Annual water billings	: TZS 116,354,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Kiosk**
Metered (**TZS/m3**)	200	300	350	250
Flat rate (**TZS/Month**)	3,000 – 4,500	6,000	7,000	5,000

Challenges

1. Low metering ratio.
2. High NRW.
3. Lack of sufficient and qualified staff.
4. Insufficient storage capacity.

LIWALE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Liwale Urban Water Supply and Sanitation Authority (LIUWASA) was established by Act No. 8 of 1997, and came into operation on 30th January, 2004. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Liwale Township which is the headquarters of the Liwale District, Lindi Region. The utility is classified as Category **C** water authority. Its area of responsibility has an approximate total population of 28,063 people of which 20,828 people are served with water. The utility draws water from the only currently available stream water source, the Liwale river (pumping scheme), contributing about 100% of the daily water production. The combined installed production capacity is approximately 1,160m3/day. The present water production capacity is very low compared with the estimated water demand of 1,964m^3/day. The utility has no proper water quality monitoring plan and water treatment facilities. The total length of the distribution system is 27.84km and water is supplied through rationing at an average of 9.5 hrs/day. The system has three storage tanks with total capacity of 405m^3. The town has no sewerage system and onsite sanitation is monitored by the Liwale District Council.

General Data About Water Utility

Total water connections	: 1,086
Total active connections	: 1,018
Total water kiosk/standpipe	: 1
Metering ratio	: 94%
NRW	: 41%
Total staff	: 18
Staff/1000 connections	: 16.6
Annual O&M costs	: TShs. 239,817,499
Annual water collections (Arrears included)	: TShs. 63,992,282
Annual water billings	: TShs. 72,551,350

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
(TShs/m3)	500	500 - 750	650	1,500
Flat rate charge (**TShs/Month**)	2,000 – 5,500	5,000 – 10,000	15,000	15,000

Note:
The charges at water kiosks are TSHS. 50 per 20 litres jerrycan.

Challenges

1. Unreliable electric supply to operate the pump. 2. High NRW (approximate 41%). 3. Low revenue collection due to unwillingness to pay by customers. 4. Inadequate water storage tanks. 5. Aged pipeline network. 6. Lack of transport facilities. 7. Unqualified staff in some posts.

LOLIONDO **PROFILE AS PER 2007/08 DATA**

General Description About the Utility

Loliondo town is the headquarters of the Ngorongoro District, Arusha region. The service area of the Town Water Board covers Loliondo, Wasso and Sakara villages which have a total population of 10,950 people and an estimated water demand of 547.5m^3/day.

Loliondo town was declared an area of urban water supply authority in 2004, and was charged with the overall responsibility of provision of water supply to the Loliondo Township. However, the Town Water Board has not been established. The township water supply services are still operated by the District Council through the District Water Engineer.

The township mainly depends on three spring sources, namely Esuree, Kisamisi, and Engejuondare .The Esuree spring source has designed capacity of 1,036m^3/day and the average actual production of 55m^3/day . The Kisamisi spring has average water production of 67.5m3/day while, regarding Engejuondare the estimated water production is 43m^3/day.

The availability of water in the township is not reliable mainly owing to lack of proper management. The scheme extends to all the three villages forming the township. The water supply network has 6 storage tanks of combined capacities of 463.5m^3 and approximately 18km pipelines of diameters ranging from 25mm to 110mm, GS, PVC and HDPE materials. The system has 68 connected customers including domestic, institutional, commercial and 5 Public water points.

General Data About Water Utility

Total water connections	: 68
Total water kiosk/standpipe	: 5
Metering ratio	: 0%

Tariff Structure

Category	Domestic	Institutional	Commercial	Kiosk
Flat rate charge (**TZS/Month**)	10,000	12,000	10,000	50 per 20 litres jerrycan

Challenges

1. Inadequate water sources to meet the increasing water demand.
2. Lack of funds to undertake major rehabilitation of the old and dilapidated infrastructure, including expansion of the same.
3. Small customer database.

LUDEWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Ludewa Urban Water Supply and Sanitation Authority (LUDUWASA) was declared a fully autonomous public water utility in 2004, responsible for the overall operation and management of water supply and sanitation services within the Ludewa Town which is the headquarters of the Ludewa District, Iringa Region. LUDUWASA is classified as Category C water authority and started its operation in 2005. Its area of responsibility has a total population of 7,382 people in which 3,565 persons are served with water. The water sources for the Ludewa Township are from three gravity stream sources, abstracted by concrete intake weirs, which are Luisa A stream, Luisa B and Mkondachi streams. The estimated average water production from the sources during the reporting period was 466m^3/day

The combined installed production capacity is 891m^3/day while the estimated water demand is 663m^3/day. The utility has no water treatment facilities. The total length of the entire pipe network is 27.55 km and water is supplied at an average of 9 hrs. The town has 3 storage tanks with combined storage volume of 578m^3. The town has no sewerage system; presently, onsite sanitary facilities are in use under supervision of the Ludewa District Council. Ludewa WSSA has 7 employees with a deficiency of 2 staff of various qualifications and professions.

General Data About Water Utility

Total water connections	: 374
Total active connections	: 150
Total water kiosk/standpipe	: 3
Metering ratio	: 13%
NRW	: 40%
Total Staff	: 7
Staff/1000 connections	: 19
Annual O&M costs	: TZS 6,059,000
Annual water collections (Arrears included)	: TZS 7,417,645
Annual water billings	: TZS 18,858,000

Tariff Structure

Category of customer	**Domestic**	**Institutions**	**Commercial**
Metered (**TZS/m3**)	350	500	500
Flat rate (**TZS/Month**)	3000	10,000	10,000

Challenges

1. Development of additional and reliable water sources to meet the current and future water demand.
2. High NRW.
3. Low metering ratio.
4. Lack of sufficient and qualified staff to manage technical, commercial and financial operations of water utilities.

LUSHOTO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Lushoto Urban Water Supply and Sanitation Authority (LUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Lushoto urban area which is the headquarters of the Lushoto District, Tanga Region. LUWASA is classified as Category C water authority. Its area of responsibility has a total population of 21,418 people of which 15,050 persons are served. The utility draws water from three (3) water streams namely Kwembago, Kibohelo and Kamfa. Both streams supply water by gravity to the Lushoto town and originate from the Lushoto mountain catchment area. The installed production capacity is 2000m^3/day. The installed production capacity is below the estimated demand for the township of 2,235m^3/day. The total length of the distribution system is 53 km and water is supplied at an average of 12 hrs. No water treatment plant is in place. The distribution system has 7 storage tanks with total capacity of 429m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Lushoto District Town Council. LUWASA has 7 employees with deficiency of 6 employees of different professions and qualifications.

General Data About Water Utility

Total water connections	: 1,005
Total active connections	: 860
Total water kiosk/standpipe	: 10
Metering ratio	: 59.6%
NRW	: 39%
Total staff	: 7
Staff/1000 connections	: 7
Annual O&M costs	: Tzs 78,122,704
Annual water collections (Arrears included)	: Tzs 60,359,470
Annual water billings	: Tzs 61,185,450

Tariff Structure

Category of customer	**Band**	**Domestic**	**Institutional**	**Commercial**
Minimum charge (**TZS/month**)	1-15m^3	3000	NA	NA
	1-20m^3	NA	8000	8000
Consumption charge (**TZS/M^3**)	16-30m^3	200	NA	NA
	31-50m^3	250	NA	NA
	≥51m^3	350	NA	NA
	21- 100	NA	400	400
	≥101	NA	500	500

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Inadequate water sources and supply to meet demand.
2. Lack of water treatment facilities.
3. Age of the distribution pipe.
4. Lack of office building and transport for the authority.
5. Lack of sufficient and qualified staff.
6. Low metering ratio

MAFINGA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mafinga Urban Water Supply and Sanitation Authority (MAUWASA) was declared a fully autonomous public water utility in 1999, responsible for the overall operation and management of water supply and sanitation services within the Mafinga Town which is the headquarters of the Mufindi District, Iringa Region. The utility became operational since May, 2001. MAUWASA is classified as Category C water authority. Its area of responsibility has a total population of 34,414 people of which 18,220 persons are served with water. The utility draws water from two stream sources, namely the Ikangafu pumping scheme and Mkombwe gravity scheme. The average water production from the sources during the reporting period was 1,838m^3/day

The combined installed production capacity is 2,914m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 3,441m^3/day. Water treatment is done by chlorination; water testing is done quarterly. The total length of the entire pipe network is 89.7 km and water is supplied through rationing at an average of 10 hrs. The network has 8 storage tanks with combined storage volume of 2,195m^3. The town has no sewerage system; onsite sanitary facilities in use under supervision of the Mufindi District Council. Mafinga WSSA has 17 employees with deficiency of 2 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 1,817
Total active connections	: 1,752
Total water kiosk/standpipe	: 5
Metering ratio	: 27%
NRW	: 17%
Total staff	: 17
Staff/1000 connections	: 9
Annual O&M costs	: TZS 198,698,896
Annual water collections (Arrears included)	: TZS 113,534,492
Annual water billings	: TZS 241,962,200

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Metered (**TZS/m3**)	400	400	400	400
Flat rate (**TZS/Month**)	3000	20,000	20,000	30,000

Challenges

1. Low metering ratio.
2. Lack of water treatment facilities.
3. Lack of capital fund for expansion of water supply services.
4. Lack of office building and transport.
5. Lack of sufficient and qualified staff.

MAGU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Magu Urban Water Supply and Sanitation Authority (Magu-WSSA), was declared a fully autonomous public water utility in 1999, responsible for the overall operation and management of water supply and sanitation services within the Magu Township area located in the Magu District, Mwanza Region. Magu-WSSA is classified as Category C water authority. Its area of responsibility has a total population of 37,770 people of which 10,089 people are currently served. The utility draws water from the intake called Busulwa located on the Lake Victoria shore. The current combined installed production capacity is 1,065.2m^3/day .The present production capacity is low compared with the estimated water demand of 7,084.6m^3/day. The utility has neither water treatment facilities nor a water quality monitoring programme in place. The total length of the distribution system is 40km and water is supplied through rationing at an average of 6 hrs. The system has 3 storage tanks with a combined capacity of 450m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Magu Township Authority. Magu-WSSA has 20 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 1,416
Total active connections	: 810
Total water kiosk/standpipe	: 59
Metering ratio	: 0%
NRW	: 50%
Total staff	: 20
Staffs/1000 connection	: 14.1
Annual O&M costs	: Tzs 193,040,772
Annual water collections (Arrears included)	: Tzs 21,407,000
Annual water billings	: Tzs 36,960,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Flat rate charge (**TZS/Month**)	4,000	10,000	10,000	100,000

Note: The charges at water kiosks are TZS 50 per 20 litres jerrycan.
No metred customer

Challenges

1. Low production from the available water sources
2. Low network coverage
3. Lack of water treatment facilities
4. Lack of bulk metres at production points.
5. Poor billing recording and data management
6. Low connection rate as a result of low coverage
7. High NRW.
8. Lack of sufficient and qualified staff.

MAHENGE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mahenge Urban Water Supply and Sanitation Authority (Mahenge-WSSA) was established by Act No. 8 of 1997 on 13th October, 2003. Mahenge-WSSA is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Mahenge township which is the headquarters of the Ulanga District in Morogoro Region. Mahenge-WSSA is classified as Category C water authority. Its area of responsibility has a total population of 16,224 according to the 2002 census. Mahenge-WSSA depends on 6 river intakes and one ring well fitted with a diesel engine which drives the pump. Most of these schemes were constructed in the late 70's. Currently, the production is approximated to be 371.52m^3/day from the river intakes (using the average flows measurements done in the 1997 study) and about 20-30m^3/day is produced from the ring well. The estimated productions are only of 19% of the daily water demand (2,112m^3/day). Water is supplied through rationing at an average of 4 hrs/day. This network capacity is not fully utilized owing to the aged condition and unrehabilitated schemes. The utility has no water treatment facilities and water quality is monitored annually through a regional lab. The total length of the transmission and distribution system is not well established and daily operations are through the experience of available staff. There are four (4) storage tanks in place located at the Mawenge, Vigoi, and Mzenga areas with a total capacity of 450m^3. There is no any means of transport for the utility's operation and maintenance activities, in which case, the utility hire vehicles when in need. The town has no sewerage system and onsite sanitation is monitored by the Mahenge District Council.

General Data About Water Utility

Total water connections	: 727
Total active connections	: nm
Total water kiosk/standpipe	: 2
Metering ratio	: 4%
NRW	: 25%
Total staff	: 10
Staff/1000 connections	: 13.8
Annual O&M costs	: TShs. 10,924,414
Annual water collections (Arrears included)	: TShs. 12,651,650
Annual water billings	: TShs. 20,740,409

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Metered customers (**TShs/Month**)	350	400	450
Flat rate (**TShs/Month**)	2,500	15,000	15,000

Note: The charges at water Kiosks are TSHS. 10 per 20 litres jerrycan.

Challenges

1. Inadequate qualified staff. 2. Need for Rehabilitation and replacement of pipeline network. 3. Low metering ratio (4%). 4. Lack of reliable transport facilities. 5. High NRW. 6. Unwillingness to pay by Customers.

MAKETE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Makete Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2002, responsible for the overall operation and management of water supply and sanitation services within the Makete Town (Iwawa) which is the headquarters of the Makete District,Iringa Region. Makete WSSA is classified as Category C water authority and started its operation in 2004. Its area of responsibility has a total population of 18,254 people of which 10,952 persons are served with water. The water source for the Iwawa Township is from three major sources of Ivalalila stream, Kidwiva stream and Ludihani spring. All sources supply water to the Iwawa town. The average water production from the sources during the reporting period was 1,734m^3/day.

The combined installed production capacity is 2,240m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 4,438m^3/day. The utility has neither water treatment facilities nor a water quality monitoring programme. The total length of the entire pipe network is 34 km and water is supplied at an average of 18 hrs per day. The network has 2 aged storage tanks with combined storage volume of 225m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Makete District Council. The Makete WSSA has 6 employees with deficiency of 3 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 860
Total water kiosk/standpipe	: 2
Metering ratio	: 28%
NRW	: 52%
Total staff	: 6
Staff/1000 connections	: 7
Annual O&M costs	: TZS 28,022,215
Annual water collections (Arrears included)	: TZS 33,644,315
Annual water billings	: TZS 46,954,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial	Kiosks
Metered (**TZS/m3**)	300	300	375	300	
Flat rate (**TZS/Month**)	3,000	15,000 – 30,000	7,500	15,000	22,500

Challenges

1. Develop additional water sources to meet the current and future water demand.
2. Limited network coverage as well as insufficient storage capacity.
3. High NRW.
4. Low metering ratio.
5. Lack of sufficient and qualified staff.
6. Insufficient installed capacity.

MANYONI **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Manyoni Urban Water Supply & Sewerage Authority (Manyoni-WSSA) was declared a fully autonomous public water utility in 2004, responsible for the overall operation and management of water supply and sanitation services within the Manyoni township, Manyoni District, Singida Region. Manyoni-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 20,068 out of which 12,000 persons are served. The utility draws water from seven boreholes, with a total production capacity of 4,000m^3/day which is adequate enough to cater for the town water demand of 1,000m^3/day. The boreholes and the main pipeline up to the booster station was jointly constructed by the Government (through WSDP) and the Roman Catholic Mission (CPPS). Water produced in the year 2009/2010 was at an average of *510*m^3/day. The total length of the distribution pipeline system is 23.75km. Water is supplied through rationing at an average of 12 hrs. The system has 3 storage tanks with a storage capacity of about 365m^3. Manyoni WSSA has no sewerage system; onsite sanitary facilities in use are under the Manyoni District Council. The utility is served by 13 employees, all permanent.

General Data About Water Utility

Total water connections	: 460
Total active connections	: 460
Total water kiosk/standpipe	: 29
Metering ratio	: 83%
NRW	: 47%
Total staff	: 13
Staff/1000 connections	: 28
Annual O&M costs	: TZS 37,472,740.06
Annual water collections (Arrears included)	: TZS 22,641,265.00
Annual water billing	: TZS 20,707,760.00

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	500	500	500	NA
Flat rate charge (**TZS/Month**)	3,000	3,000	3,000	NA

NOTE: The charges at water kiosks are TZS 20 per 20 litres jerrycan

Challenges

1. High NRW attributable to leakages caused by broken pipes
2. Topographical constraints to reach some areas by gravity supply
3. Insufficient storage capacity

MASASI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Masasi Urban Water Supply and Sanitation Authority (MAUWASA) was established by Act No. 8 of 1997 and came into operation on 2003. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Masasi township which is the headquarters of the Masasi District, Mtwara Region. Its area of operation has an approximate total population of 110,647 people of which 23,250 people are served with water. The utility draws water from two main types of water sources, namely Mwena Spring (gravity scheme) contributing about 61% of the daily water production, and seven boreholes (of which only four are working) contributing the remaining 39%. The combined installed production capacity is approximately 7000m^3/day but it is not fully utilized owing to a worn-out transmission line and frequent breakdown of borehole pumps. The present production is approximately 1,824m^3/day and is very low compared with the estimated water demand of 7,745m^3/day. The utility has no proper water quality monitoring plan and no water treatment facilities. The total length of the distribution system is 82.25km and water is supplied through rationing at an average of 2 hrs/day. The system has six storage tanks with capacity of 1,170m^3. The town has no sewerage system and onsite sanitation is monitored by the Masasi District Council

General Data About Water Utility

Total water connections	: 853
Total active connections	: 750
Total water kiosk/standpipe	: 21
Metering ratio	: 38%
NRW	: 65%
Total staff	: 19
Staff/1000 connections	: 25.3
Annual O&M costs	: TShs. 56,334,320
Annual water collections (Arrears included)	: TShs. 87,592,340
Annual water billings	: TShs. 50,694,890

Tariff Structure

Category of customer	**Domestic**	**Institutionsal**	**Commercial**	**Industrial**
(TShs/m3)	1,000	1,500	2,000	2,500
Flat rate charge (**TShs/Month**)	10,000	30,000	40,000	1,000,000

Note:
1. The charges at water kiosks are TSHS. 50 per 20 litres jerrycan.
2. The flat rate Industrial customer is having bottling plant.

Challenges

1. Aged pipeline network. 2. Inadequate water sources. 3. Frequent Electricity cut-off. 4. Low network coverage (network is concentrated at CBD area only. 5. Lack of sufficient and qualified staff. 6. Utility does not its own office (share DWE offices) 7. High reported NRW of 65%.

MBINGA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mbinga Urban Water Supply and Sanitation Authority (MBIUWASA) was declared a fully autonomous public water utility and started its operations when its first board was established on 1st November, 2002. MBIUWASA is responsible for the overall operation and management of water supply and sanitation services within the urban area of Mbinga which is the headquarters of the Mbinga District, Ruvuma Region. MBIUWASA is classified as Category **C** water authority. Its area of operation has a total population of 33,749 people of which 18,140 people are served. The utility draws water from two main types of water sources, namely the Ndegu river stream source which is the main source contributing about 86% of the daily water production, and Mhekela and Utiri springs contributing the remaining 14%. The two springs were constructed by the Catholic Diocese of Mbinga and there is a shared operational agreement with MBIUWASA. The combined installed production capacity is approximately 2,049m^3/day but it is not fully utilized owing to a worn -out transmission line and low network coverage. The present production of 1,437m^3/day is very low compared with the estimated water demand of 3,180m^3/day. The utility has no proper water treatment facilities, apart from settlement in the tanks with addition of alum and, thereafter, chlorination. The total length of the distribution system is 15.44km and water is supplied through rationing at an average of 6 hrs/ day. The system has three storage tanks with capacity of 500m^3. The town has no sewerage system and onsite sanitation is monitored by the Mbinga District Council.

General Data About Water Utility

Total water connections	: 1,400
Total active connections	: 1,048
Total water kiosk/standpipe	: 22
Metering ratio	: 75%
NRW	: 49%
Total staff	: 13
Staff/1000 connections	: 9.3
Annual O&M costs	: TShs. 86,000,228
Annual water collections (Arrears included)	: TShs. 90,333,770
Annual water billings	: TShs. 81,573,440

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**
Cons: 0 – 10m3 **(TShs/m3)**	300	300	300
Above 10 m3 **(TShs/m3)**	350	350	350
Flat rate charge (**TShs/month**)	2,000 - 3,000	2,500 – 6,500	-

Note: The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. Worn-out pipeline network which needs repair. 2. Inadequate capacity of intake at the water sources (low production). 3. Low network coverage. 4. Lack of water treatment plant at gravity scheme. 5. Lack of sufficient and qualified staff. 6. Very high NRW. 7. Lack of motorvehicle.

MBULU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mbulu Urban Water Supply and Sanitation Authority (MBUWASA) was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services within the Mbulu urban area which is the headquarters of the Mbulu District, Manyara Region. MBUWASA is classified as Category C water authority. Its area of responsibility has a total population of 23,091 people in which 20,213 persons are served. The utility draws water from four spring sources, namely Endere and Indirim springs, Endagikoti artesian well and Endagikot spring.. The first two springs supply water by gravity to the Mbulu town and originate from the Mbulu mountain catchment area. The combined installed production capacity is 1264m^3/day. The installed production capacity is not sufficient to meet the estimated demand for the township of 1921m^3/day. The total length of the distribution system is 68.3 km and water is supplied at an average of 18 hrs. There are 7 storage tanks which have combined storage volume of 630m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Mbulu District Town Council. MBUWASA has 9 employees and the number of actual staff required has not been established.

General Data About Water Utility

Total water connections	: 986
Total active connections	: 954
Total water kiosk/standpipe	: 29
Metering ratio	: 92.4%
NRW	: 41.88%
Total staff	: 9
Staff/1000 connections	: 9.1
Annual O&M costs	: Tzs 105,972,567
Annual water collections (Arrears included)	: Tzs 89,534,090
Annual water billings	: Tzs 95,772,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charges (**TZS/M^3**)	500	500	500	500
Flat rate(**TZS/Month**)	3500	3500	3500	3500

Note: The Charges at water Kiosks are TZS 30 per 20 litres jerrycan.

Challenges

1. Capital fund for major rehabilitation of old and dilapidated distribution network.
2. Reduction of high figures of NRW.
3. Lack of transport facilities for operation and maintenance activities.
4. Lack of office as well as office working tools.

MISUNGWI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Misungwi Urban Water Supply and Sanitation Authority (MIUWASA), was declared a fully autonomous public water utility in 2004, responsible for the overall operation and management of water supply and sanitation services within the Misungwi urban area which is the headquarters of the Misungwi District, Mwanza Region. MIUWASA is classified as Category C water authority. Its area of responsibility has a total population of 30,000 people of which 11,475 people are currently served. The utility draws water from the Mitindo dam with a combined installed production capacity of 419.2m^3/day .The present production capacity is low compared with the estimated water demand of 2,100m^3/day. The total length of distribution system is 10.5 km and water is supplied through rationing at an average of 5 hrs. The system has 5 storage tanks with a combined capacity of 410m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Misungwi District Council. MIUWASA has 9 employees with a deficiency of 5 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 410
Total active connections	: 410
Total water kiosk/standpipe	: 1
Metering ratio	: 58.1%
NRW	: 30%
Total staff	: 9
Staffs/1000 connection	: 38.7
Annual O&M costs	: Tzs 64,683,359
Annual water collections (Arrears included)	: Tzs 42,471,268
Annual water billings	: Tzs 56,676,850

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	800	1,000	1,000	-
Flat rate charge (**TZS/Month**)	6,000	15,000	15,000	-

Note: The charges at water kiosks are TZS 30 per 20litres jerrycan.

Challenges

1. The production of water is not according to the installed pumping capacity due to using rising main as a distribution main.
2. Inadequate production capacity.
3. Lack of water treatment facilities.
4. Low network coverage.
5. High NRW.

MKURANGA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mkuranga Urban Water Supply and Sanitation Authority declared a fully autonomous public water utility in 2004 and came into operational in 2008. Mkuranga WSSA is responsible for the overall operation and management of water supply and sanitation services in the MkurangaTown in the Mkuranga District, Coast Region. Mkuranga WSSA is classified as Category C water authority. Its area of responsibility has a total population of 10,778 people. The utility draws water from the Kurungu borehole. The installed production capacity is 312m^3/day .The installed production capacity is very low compared with the estimated water demand of 605m^3/day. The utility has neither water treatment facilities nor water quality monitoring in place. The total length of the distribution system is 8.9 km and water is supplied at an average of 6 hrs. There are 2 water storage tanks with combined storage capacity of 157.5m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Mkuranga District Council. Mkuranga WSSA has 8 employees but all working under the District Water Engineer.

General Data About Water Utility

Total water connections	: 44
Total water kiosk/standpipe	: 1
NRW	: 15%
Metering ratio	: 100%
Total staff	: 8
Staff/1000 connections	: 181
Annual water collections (Arrears included)	: Tzs 2,181,100
Annual water billings	: Tzs 2,956,195

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	650	650	650	650
Flat rate charge (**TZS/Month**)	10,000	NA	NA	NA

Challenges

1 Inadequate water sources and water supply to meet the demand.
2 Lack of office building.
3 Lack of sufficient and qualified staff.

MONDULI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Monduli Urban Water Supply and Sanitation Authority (MOUWASA) was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services in the Monduli Town which is the headquarters of the Monduli District,Arusha Region. MOUWASA is classified as Category C water authority. Its area of responsibility has a total population of 7,578 people of which 5,100 persons are currently served. The utility draws water from two sources, namely Lolomsikio stream which originate from a spring source within the Monduli mountain forest reserve and three boreholes situated at Ngaramtoni well field. The installed production capacity is 4,258.8m^3/day .The installed production capacity sufficient to meet the estimated water demand of 1000m^3/day. The utility has neither water treatment facilities nor water quality monitoring programme in place. The total length of the distribution system is 100 km and water is supplied at an average of 12 hrs. There are 7 water storage tanks with combined storage capacity 1,170 m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Monduli District Council. MOUWASA has 10 employees with a deficiency of 6 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 489
Total active connections	: 390
Total water kiosk/standpipe	: 2
Metering ratio	: 46%
NRW	: 72%
Total staff	: 10
Staff/1000 connections	: 20
Annual O&M costs	: Tzs 85,163,128
Annual water collections (Arrears included)	: Tzs 43,205,780
Annual water billings	: Tzs 55,340,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Flat rate charge (**TZS/Month**)	1,500	1,500	2,000

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Inadequate power supply (low voltage) to run all borehole pumps. .
2. Low metering ratio.
3. Capital fund for expansion of distribution network and replacement of dilapidated pipe network at town centre.
4. Lack of office building and transport.
5. Lack of sufficient and qualified staff.

MPANDA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mpanda Urban Water Supply and Sanitation Authority (MUWASA) was declared a fully autonomous public water utility in 2003, and is responsible for the overall operation and management of water supply and sanitation services in the Mpanda Township which is the headquarters of the Mpanda District, Rukwa Region. MUWASA is classified as Category C water authority. Its area of responsibility has a total population of 63,000 people of which 40,844 persons are served with water. The utility draws water from three types of sources which are the Milala dam pumping scheme, Manga stream which is a gravity scheme, and 24 deep and shallow wells. The average water production from the sources during the reporting period was 2,930m^3/day.

The source installed production capacity is 4,100m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 4750m^3/day. The utility has no water treatment facilities and water quality monitoring is not done. The total length of the entire pipe network is 73.5 km and water is supplied at an average of 8 hrs. The network has 5 storage tanks with different capacities of combined storage volume of 480m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Mpanda District Council. MUWASA has 25 employees and has not yet established to the total number of employees required at the moment.

General Data About Water Utility

Total water connections	: 2,333
Total active connections	: 2,206
Total water kiosk/standpipe	: 46
Metering ratio	: 8%
NRW	: 50%
Total staff	: 25
Staff/1000 connections	: 11
Annual O&M costs	: TZS 331,357,743
Annual water collections (Arrears included)	: TZS 130,651,168
Annual water billings	: TZS 124,127,715

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Metered (**TZS/M^3**)	400	450 - 500	450 - 500	600
Flat rate (**TZS/Month**)	5,000	5,000 – 10,000	7,500 – 10,000	50,000

Kiosk tariff is at TZS 30 per 20 litre jerrycan.

Challenges

1. High NRW.
2. Low metering ratio.
3. Lack of water treatment facilities.
4. Lack of funds for rehabilitation and expansion of water supply services.
5. Capacity building of existing staff.
6. Lack of office building and transport facilities.

MPWAPWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mpwapwa Urban Water Supply and Sanitation Authority (MPWUWSA) was declared a fully autonomous public water utility through Government Notice No. 258 published on 21st June, 2002. MPWUWSA is responsible for the overall operation and management of water supply and sanitation services within the urban area of Mpwapwa which is the headquarters of the Mpwapwa District,Dodoma Region. Its area of operation has a total population of 50,941 people of which 24,000 people are served. The utility draws water from two main types of water sources, the Mayawile Stream (gravity scheme) contributing about 72% of the daily water production, and two boreholes located at the Kikombo area contributing the remaining 28%. The combined installed production capacity is approximately 1,871m^3/day but it is not fully utilized owing to a worn-out transmission line and non-working boreholes. The present production of 1,271m^3/day is very low compared with the estimated water demand of 7,500m^3/day. The utility has no proper water treatment facilities, apart from de-silting tank, and also a water quality monitoring plan is not in place. The total length of the distribution system is 67.55km and water is supplied through rationing at an average of 10 hrs /day. The system has one storage tank with capacity of 225m^3. The town has no sewerage system and onsite sanitation is monitored by the Mpwapwa District Council

General Data About Water Utility

Total water connections	: 1,084
Total active connections	: 603
Total water kiosk/standpipe	: 15
Metering ratio	: 66%
NRW	: 37.7%
Total staff	: 39
Staff/1000 connections	: 64
Annual O&M costs	: TShs. 92,302,047
Annual water collections (Arrears included)	: TShs. 102,447,053
Annual water billings	: TShs. 117,600,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Religious
Cons: 0 – 10m3 (Religious 0 -15m3) **Minimum charge**	4,000	15,000	15,000	4,000
Above 10 m3 (Religious 15m3) **(TShs/m3)**	650	800 - 1000	800 - 1000	800
Flat rate charge (**TShs/month**)	7,000	20,000	20,000	20,000

Note: The charges at water kiosks are TSHS. 10 per 20 litres jerry can.

Challenges

1. Aged pipeline network which needs rehabilitation/replacement. 2. Unreliability of gravity water sources. 3. Low network coverage. 4. Lack of water treatment plant at Mayawile gravity scheme. 5. Lack of sufficient and qualified staff. 6. High NRW.

MUGUMU **PROFILE AS PER 2007/08 DATA**

General Description About the Utility

Mugumu Urban Water Supply & Sewerage Authority (MUGUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Mugumu urban area, which is the headquarters of the Serengeti District, Mara Region. MUGUWASA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 23,000. The utility draws water from three boreholes, with a total production capacity of 264m^3/day, as well as from the Manchira dam with capacity of 38,356m^3/day. The total combined production capacity is sufficient compared with the estimated water demand of 1,500m^3/day. The total length of the pipeline system is 35km. Water is supplied through rationing at an average of 2 hrs. The system has 3 storage tanks with a storage capacity of about 750m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Serengeti District Council. MUGUWASA has 21 employees, 5 permanent and 16 temporary.

General Data About Water Utility

Total water connections	: 705
Total active connections	: 692
Total water kiosk/standpipe	: 13
Metering ratio	: 70%
NRW	: 45%
Total staff	: 21
Staffs/1000 connection	: 30

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	500	500	500	NA
Flat rate charge (**TZS/Month**)	5,000	5,000-300,000	10,000	NA

NOTE: The charges at water kiosks are TZS 25 per 20 litres jerrycan

Challenges

1. No meter has been installed at any production borehole.
2. High NRW.
3. Inefficient staff to connection ratio.
4. Low customer base.

MUHEZA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Muheza Urban Water Supply and Sanitation Authority (MUHUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Muheza township area which is the headquarters of the Muheza District, Tanga Region. MUHUWASA is classified as Category C water authority. Its area of responsibility has a total population of 27,895 people of which 13,260 persons are currently served. The utility draws water from the Mkulumuzi stream which collects water from several springs originating from the Manga and Magoroto hills. The installed production capacity of the intake is 1,920m^3/day. However, maximum actual production of 1,425m^3/day is experienced during the rainy season. The installed production capacity is insufficient to meet the present estimated demand for the township which is 4,831m^3/day. The total length of the distribution system is 11 km and water is supplied through rationing at an average of 6 hrs. There is no treatment plant in place and water quality monitoring is not being conducted. The system has 2 storage tanks with storage capacity of 270m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Muheza District Town Council. MUHUWASA has 8 employees and the total number of staff required has not been established.

General Data About Water Utility

Total water connections	: 1,843
Total active connections	: 1,605
Total water kiosk/standpipe	: 20
Metering ratio	: 46 %
NRW	: 40%
Total staff	: 8
Staff/1000 connections	: 4.3
Annual O&M costs	: TZS 75,942,781
Annual water collections (Arrears included)	: TZS 57,617,525
Annual water billings	: TZS 41,536,770

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	150	200	350	500

Note: The charges at water kiosks are TZS 3 per 20 litres jerrycan.

Challenges

1. Inadequate water sources to meet the growing population and increasing water demand.
2. Lack of water treatment facilities.
3. Old and dilapidated infrastructure which requires immediate intervention.
4. Lack of office building and transport for the authority.
5. Lack of sufficient and qualified staff.
6. Reduction of high NRW
7. Water meter theft

MULEBA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

MulebaUrban Water Supply and Sanitation Authority (MLUWASA), was declared a fully autonomous public water utility in 2004 responsible for the overall operation and management of water supply and sanitation services within the Muleba urban area which is the headquarters of the Muleba District, Kagera Region. MLUWASA is classified as Category C water authority. Its area of responsibility has a total population of 17,402people of which 8,490 people are currently served. The utility draws water from two springs, namely Kaigara and Nyamwala . Both sources have a total installed production capacity of 736m^3/day .The present production capacity is low compared with the estimated water demand of 1,353m^3/day. The total length of the pipeline system is 40.5 km and water is supplied through rationing at an average of 13 hrs. The system has 6 storage tanks with a combined capacity of 1,417m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Muleba District Town Council. MLUWASA has 9 employees and 2 daily paid staff of different qualifications and professions.

General Data About Water Utility

Total water connections	: 366
Total active connections	: 306
Total water kiosk/standpipe	: 17
Metering ratio	: 88.2%
NRW	: 26.4%
Total staff	: 9
Staffs/1000 connection	: 24
Annual O&M costs	: Tzs 108,497,602.5
Annual water collections (Arrears included)	: Tzs 33,862,370.00
Annual water billings	: Tzs 41,208,210.00

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	800	1,000	1,200	1,200
Flat rate charge (**TZS/Month**)	4,000	10,000	15,000	15,000

Note: The charges at water kiosks are TZS 25 per 20 litres jerrycan.

Challenges

1. Insufficient water production capacity.
2. Water bills areas are too high.
3. Low collection.
4. Low customer base.

MWANGA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mwanga Urban Water Supply and Sanitation Authority (MWANGUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Mwanga urban area which is the headquarters of the Mwanga District, Kilimanjaro Region. MWANGUWASA is classified as Category C water authority. Its area of responsibility has a total population of 14,500 people of which 8,000 persons are currently served. The utility draws water from two boreholes and they have two standby streams of Chang'ombe and Mbochiro. The combined installed production capacity for the two boreholes stood at 1,080m^3/day. The installed production capacity is not sufficient to meet the estimated demand for the township of 2,200m^3/day. The total length of the distribution system is 81.13 km and water is supplied at an average of 6 hrs. There are 8 storage tanks which have combined storage volume of 1,102.5m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Mwanga District Council. MWANGUWASA has 21 employees.

General Data About Water Utility

Total water connections	: 1,358
Total active connections	: 987
Total water kiosk/Standpipe	: 6
Metering ratio	: 28.7%
NRW	: 41%
Total staff	: 21
Staff/1000 connections	: 15
Annual O&M costs	: Tzs 209,842,361
Annual water collections (Arrears included)	: Tzs 51,281,735
Annual water billings	: Tzs 68,565,565

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charges (**TZS/M^3**)	300	450	650	900
Flat rate(**TZS/Month**)	2500	5000	7,500	N/A

Note: The charges at water kiosks are TZS 6 per 20 litres jerrycan.

Challenges

1. Capital fund for major rehabilitation of old and dilapidated distribution network.
2. Inadequate water sources.
3. Lack of office building and transport.
4. Lack of transport facilities for operation and maintenance activities.

MWANHUZI	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Mwanhuzi Urban Water Supply & Sewerage Authority (Mwanhuzi-WSSA) was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services within the Mwanhuzi township, Meatu District, Shinyanga Region. Mwanhuzi-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 24,250. Currently there is no piped system in place; it has collapsed when the Mwanyahina dam collapsed in 1999. The utility draws water from rain water, dug wells and raw water from the Mwanyahina Dam, which has a total production capacity of 4,315m^3/day which is very sufficient compared with the estimated water demand of 2,084m^3/day. Since 2005, the Meatu District Council has been implementing a water supply project under the RWSSP and in since 2007 under the WSDP. The project involves construction of the gravity main from the Mwanyahina dam to the treatment plant about 2.8km, construction of a treatment plant, construction of three elevated storage tanks of 710m^3 capacity, and construction of a distribution network. The town has no sewerage system; presently, onsite sanitary facilities are in use under the Meatu District Council. The utility is served by 4 employees, all are permanent.
General Data About Water Utility	The water supply infrastructure is still under construction.
Tariff Structure	**NOTE:** Vendors are selling water at TZS 1,000-1,500 per 6 containers of 20 litres.
Challenges	1. Low production capacity in comparison with the town demand 2. Small distribution network

NACHINGWEA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Nachingwea Urban Water Supply and Sanitation Authority (NAUWASA) was established by Act No. 8 of 1997 and came into operation on 16th November, 2004. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Nachingwea township which is the headquarters of the Nachingwea District, Lindi Region. Its area of operation has a total population of approximately 23,092 people of which 9,699 people are currently served. The utility draws water from two well fields of the Mkumba Shamba and Mkumba Pacha. Boreholes in the Mkumba Shamba contribute about 75% of daily production while those in the Mkumba Pacha contribute the remaining 25%. The combined installed production capacity is approximately 3,096m^3/day but it is not fully utilized owing to a worn-out transmission line, unreliable electricity power and low pipeline network coverage. The present production of 2,364m^3/day is very low compared with the estimated water demand of 5,640m^3/day. The utility has no proper water quality monitoring plan and water supplied from the boreholes is not treated. The total length of the distribution system is 28.9km and water is supplied through rationing at an average of 5 hrs/day. The utility has two storage tanks with total capacity of 3,138m^3 and both are working. The town has no sewerage system and onsite sanitation is monitored by the Nachingwea District Council.

General Data About Water Utility

Total water connections	: 812
Total active connections	: 696
Total water kiosk/standpipe	: 3
Metering ratio	: 51%
NRW	: 49.6%
Total staff	: 14
Staff/1000 connections	: 17.2
Annual O&M costs	: TShs. 101,117,343
Annual water collections (Arrears included)	: TShs. 23,691,195
Annual water billings	: TShs. 34,576,265

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Cons: 1 – 50m3 (Domestic: 1 -10m3) (**TShs/m3**)	500	500	500
Flat rate (**TShs/month**)	2,000	4,800	4,800

Note:
i) The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. High NRW leading to low billing. 2. Low income growth lead by unwillingness by customers to pay their bills. 3. Unreliable electricity supply from TANESCO. 4. Lack of adequate qualified staff. 5. Lack of potential water sources. 6. Problems of saline water from the boreholes. 7. Lack of investment funds

NAMANYERE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Namanyere Urban Water Supply and Sanitation Authority (NAUWSA) was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services within the Namanyere Town which is the headquarters of the Nkasi District,Rukwa Region. NAUWSA is classified as Category C water authority which started its operation in 2005. Its area of responsibility has a total population of 25,787 people of which 3,868 persons are served with water. The main water sources for the Namanyere town are 12 medium boreholes and the Mfili dam which is not in use owing to NAUWSA failure to meet its operational costs. During the reporting period the average water production from the 12 boreholes is $10m^3$/day.

The installed water production capacity of the Mfili dam, which is rarely used, is 2,400 while the combined yield capacities for the 12 boreholes are $300m^3$/day. The present production capacity of the sources under utilization is not sufficient to meet the estimated water demand of $1,020m^3$/day. The utility has no water treatment facilities; however, water quality monitoring is done but not regularly, and the water sources are well protected. The total length of the entire pipe network is 18.192 km and water is supplied at an average of 9 hrs. The network has 2 storage tanks with combined storage volume of $360m^3$. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Nkasi District Council. NAUWSA has 5 employees and the actual number of staff required with different qualifications and professions is yet to be established.

General Data About Water Utility

Total water connections	: 200
Total water kiosk/standpipe	: 4
Metering ratio	: 0
Total staff	: 5
Staff/1000 connections	: 25
Annual O&M costs	: Tzs 4,258,000
Annual water collections (Arrears included)	: Tzs 2,858,400
Annual water billing	: Tzs 5,400,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption Rate (**TZS/m3**)	NA	NA	NA	NA
Flat rate (**TZS/month**)	2,500	6,000	7,500	7,500

Note :Tariff at Kiosk is TZS 25 per 20 litres jerrycan

Challenges

1. Lack of fund for operating fuel pumps at Mfili dam.
2. Lack of fund for metering their customers.
3. Low billing and collection efficiency.
4. High water leakages.
5. Lack of transport.
6. Lack of sufficient and qualified staff.

NAMTUMBO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Namtumbo Urban Water Supply and Sanitation Authority was established by Act No. 8 of 1997 and came into operation on 8th September, 2005. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Namtumbo township which is the headquarters of the Namtumbo District,Ruvuma Region. Its area of operation has an approximate total population of 30,000 people of which 16,800 people are currently served. The utility draws water from one main water source of the Namikiga stream located at the Libango village (gravity scheme) contributing about 100% of the daily water production. There was also an old source called Rwinga pumping scheme (the first old scheme at Namtumbo township) that is currently not working. The installed production capacity of the Namikiga stream is approximately 1,211m^3/day which does not meet the daily demand of the Namtumbo township (comprising three sub-villages) and four other villages along the transmission line from the Namikiga stream, which is worn-out with frequent breakdown during the rainy season. The present production (water reaching Namtumbo) of approximately 600m^3/day is very low compared with the estimated water demand (for Namtumbo only) of 1,200m^3/day. The utility has no water treatment facilities and water quality is monitored annually using a regional laboratory. The total length of the distribution system is 13.3km and water is supplied through rationing at an average of 8 hrs/day. The system has three storage tanks with total capacity of 250m^3. The town has no sewerage system and onsite sanitation is monitored by the Namtumbo District Council.

General Data About Water Utility

Total water connections	: 556
Total active connections	: 500
Total water kiosk/standpipe	: 52
Metering ratio	: 38%
NRW	: 47.7%
Total staff	: 7
Staff/1000 connections	: 12.6
Annual O&M costs	: TShs. 37,445,450
Annual water collections (Arrears included)	: TShs. 21,503,600
Annual water billings	: TShs. 26,308,900

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Metered customers (**TShs/month**)	500	1,000	1,000
Flat rate customers (**TShs/m3**)	3,000	20,000	20,000

Note:
The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. Low production compared to the demand. 2. Need of improving source infrastructure and construction of treatment plant. 3. Lack of office building. 4. Lack of adequate qualified personnel. 5. Poor quality of supplied water. 6. Aged water supply infrastructure. 7. Lack of transport facilities.

NANSIO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Nansio Urban Water Supply and Sewerage Authority (NAUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Nansio Urban area which is the headquarter of the Ukerewe District, Mwanza Region. NAUWASA is classified as Category C water authority. Its area of responsibility has a total population of 61,659 people of which 5,646 people are currently served. The utility draws water from Lake Victoria. The source has a total installed production capacity of 4,800m^3/day .The present production capacity is sufficient compared with the estimated water demand of 2,499.6m3/day. The total length of the pipeline system is 40km. Water is supplied through rationing at an average of 7 hrs. The system has 4 storage tanks with a combined capacity of 193m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Nansio Town Council. NAUWASA has 6 employees, all are permanent.

General Data About Water Utility

Total water connections	: 663
Total active connections	: 663
Total water kiosk/standpipe	: 3
Metering ratio	: 8.1%
NRW	: 45.7%
Total staff	: 3
Staffs/1000 connection	: 4.5
Annual O&M costs	: Tzs 35,629,292
Annual water collections (Arrears included)	: Tzs 34,511,314
Annual water billings	: Tzs 39,163,475

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	300	350	500	600
Flat rate charge (**TZS/Month**)	5,000	10,000	15,000	NA

Note: The Charges at water Kiosks are TZS 20 per 50 litres jerrycan.

Challenges

1. Low customer base.
2. Low metering and lack of funds for new metre installation
3. High NRW.
4. Inadequate staff.

NGARA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Ngara Urban Water Supply and Sanitation Authority (NGUWASA) was declared a fully autonomous public water utility in 2003 and is responsible for the overall operation and management of water supply and sanitation services within the Ngara urban area which is the headquarters of the Ngara District, Kagera Region. NGUWASA is classified as Category C water authority. Its area of responsibility has a total population of 21,761 people of which 19,346 people are currently served. The utility draws water from three (3) boreholes located at different locations in the Ngara town. The boreholes have a combined installed production capacity of 2,184m^3/day .The present production capacity is sufficient compared with the estimated water demand of 1,519m^3/day. The total length of the distribution system is 48.3 km and water is supplied through rationing at an average of 10 hrs. The system has 5 storage tanks with a combined capacity of 703m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Ngara District Town Council. NGUWASA has 18 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 1,580
Total active connections	: 1,540
Total water kiosk/standpipe	: 34
Metering ratio	: 100%
NRW	: 41.3%
Total staff	: 18
Staffs/1000 connection	: 11.4
Annual O&M costs	: Tzs 347,153,229.90
Annual water collections (Arrears included)	: Tzs 98,347,820.00
Annual water billings	: Tzs 116,940,600.00

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	530	705	705	NA

Note: The charges at water kiosks are TZS 10 per 20 litres jerrycan.

Challenges

1. High NRW.
2. Lack of competent/qualified staff.
3. Manual system in billing.

NGUDU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Ngudu Urban Water Supply & Sewerage Authority (Ngudu-WSSA), was declared fully autonomous public water utility in 1999, and is responsible for overall operation and management of water supply and sanitation services within the Ngudu Urban area, which is the headquarters of the Kwimba District, Mwanza Region. Ngudu-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 18,715 of which 8,362 people are currently served. The utility draws water from six boreholes, with a total production capacity of 840m^3/day which is insufficient compared with the estimated water demand of 1,292m^3/day. The total length of the pipeline system is 11.4km. Water is supplied through rationing at an average of 4 hrs. The system has 3 storage tanks with a storage capacity of about 240m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Kwimba District Town Council. Ngudu-WSSA has 10 employees.

General Data About Water Utility

Total water connections	: 413
Total active connections	: 376
Total water kiosk/standpipe	: 1
Metering ratio	: 39.9%
NRW	: 25%
Total staff	: 10
Staffs/1000 connection	: 24.2
Annual O&M costs	: Tzs 90,123,494.23
Annual water collections (Arrears included)	: Tzs 30,660,220.00
Annual water billings	: Tzs 29,420,000.00

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	700	900	700	-
Flat rate charge (**TZS/Month**)	4,000	4,000	N/A	-

NOTE: The charges at water kiosks are TZS 20 per 20litres jerry can

Challenges

1. Inadequate storage capacity.
2. Low metering as most of the customers are not metered.
3. Low production capacity as compared to demand.
4. The pumps and infrastructure in general are old and worn-out.

NJOMBE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Njombe Urban Water Supply and Sanitation Authority (NJUWASA) was declared a fully autonomous public water utility in 1998 and is responsible for the overall operation and management of water supply and sanitation services within the Njombe Town which is the headquarters of the Njombe District, Iringa Region. NJUWASA is classified as Category C water authority and started its operation in 2002. Its area of responsibility has a total population of 50,100 people of which 34,619 persons are directly served with water. The water source for the Njombe Township is from three major sources of Magoda, Lunyanyu and Wikichi spring sources that contribute approximately 74% of total water production. There are also other small springs of Kihesa A&B, Kwaulaya and Joshoni that add to the remaining 26% of the total daily production. All sources supply water to the Njombe town through gravity system. The estimated average water production from the sources during the reporting period was 3,317m^3/day.

The combined installed production capacity is 3,467m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 4800m^3/day. The utility has no water treatment facilities; however, water quality tests are conducted quarterly. The total length of the entire pipe network is 84.9 km and water is supplied at an average of 8 hrs. The network has 10 storage tanks with combined storage volume of 685m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Njombe District Council. Njombe WSSA has 27 employees.

General Data About Water Utility

Total water connections	: 2,915
Total active connections	: 2,865
Total water kiosk/standpipe	: 30
Metering ratio	: 66%
NRW	: 42%
Total staff	: 27
Staff/1000 connections	: 9
Annual O&M costs	: TZS .177,821,276
Annual water collections (Arrears included)	: TZS 251,518,149
Annual water billings	: TZS 290,656,443

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Kiosks**
Metered (**TZS/m^3**)	350	500	500	500
Flat rate (**TZS/month**)	3,000 – 9,500	25,000	8,000 - 13,000	12,000

Challenges

1. Inadequate water supply to meet the water demand – development of additional water sources and extension of pipe network
2. High NRW.
3. Addressing sanitation issues in Njombe town
4. Capacity building of existing staff

NZEGA **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

NzegaUrban Water Supply and Sewerage Authority (Nzega-UWASA) was declared a fully autonomous public water utility in 1999 and is responsible for the overall operation and management of water supply and sanitation services within the Nzega Urban area which is the headquarters of the Nzega District, Tabora Region. Nzega-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 32,232 of which 19,436 persons are currently served. The Water supply system is operated by a private company called WEDECO under the management contract with the Nzega WSSA. The utility draws water from the Uchama and Kilimi earthfill dams. The dams have combined production capacity of 1,205.5 m^3/day, which is sufficient compared with the estimated water demand of 2,100m^3/day. The total length of the pipeline system is 39.6km. Water is supplied through rationing at an average of 18 hrs. The system has 4 storage tanks with a combined capacity of 595m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Nzega District Town Council. Nzega-WSSA has 9 employees, 5 permanent and 4 on contract.

General Data About Water Utility

Total water connections	: 1,508
Total active connections	: 1386
Total water kiosk/standpipe	: 21
Metering ratio	: 100%
NRW	: 36.3%
Total staff	: 9
Staff/1000 connections	: 6
Annual O&M costs	: Tzs 233,547,461.98
Annual water collections (Arrears included)	: Tzs 143,250,025.21
Annual water billings	: Tzs 173,386,909

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	750	850	900	900
Flat rate charge (**TZS/month**)	NA	NA	NA	NA

Note: The charges at water kKiosks are TZS 20 per 20 litres jerry can.

Challenges

1. Institutional customers do not settle their bills on time.
2. Water weeds at Uchama dam endangering its existence.
3. Lack of sufficient income to cover investment.

ORKESUMET **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Orkesumet Urban Water Supply and Sanitation Authority (OUWSSA) was declared a fully autonomous public water utility in 2008, and is responsible for the overall operation and management of water supply and sanitation services in the Orkesumet Town which is the headquarters of the Simanjiro District, Manyara Region. OUWSSA is classified as Category C water authority. Its area of responsibility has a total population of 13,291 people of which 6,380 persons are currently served. The utility depends on 3 operational borehole sources for water production and have combined installed yield capacity of 535.7 m^3/day by assuming 24 pumping hours. The average production from the sources is 181m^3/day .The production extremely too low to meet the estimated water demand of 600m^3/day. The town has no sewerage system; onsite sanitary facilities are in use under the Simanjiro District Council. OUWSSA has 5 employees with a deficiency of 15 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 8
Total active connections	: 8
Total kiosks	: 11
Metering ratio	: 100%
Total staff	: 5
Staff/1000 connections	: 789
Annual O&M costs	: Tzs 6,470,400
Annual water collections (Arrears included)	: Tzs 3,409,000
Annual water billings	: Tzs 2,879,050

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	2500	NA	NA	NA

Note: The charges at water kiosks are TZS 50 per 20 litres jerrycan

Challenges

1. Inadequate water sources and water supply to meet the demand.
2. The customer base is very low.
3. Lack of office building and transport.
4. Lack of sufficient and qualified staff.
5. Lack of storage tanks.
6. Small water supply network.

PANGANI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Pangani Commercial Water Supply and Sanitation Authority (PACWASA) was declared a fully autonomous public water utility in 2004 and is responsible for the overall operation and management of water supply and sanitation services within the Pangani urban area which is the headquarters of the Pangani District, Tanga Region. PACWASA is classified as Category C water authority. Its area of responsibility has a total population of 16,250 people of which 10,550 persons are currently served. The utility draws water from three boreholes (*BH_1, BH2, and BH3*) with a combined installed production capacity of 1,404m^3/day .The present production capacity is low compared with the estimated water demand of 2,250m^3/day. The total length of the distribution system is 60.4 km and water is supplied through rationing at an average of 10.25 hrs. The system has 3 storage tanks with combined capacity of 787.5m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Pangani District Town Council. PACWASA has 15 employees with a deficiency of 3 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 1,080
Total active connections	: 950
Total water kiosk/Standpipe	: 7
Metering ratio	: 60%
NRW	: 30%
Total staff	: 15
Staff/1000 connections	: 14.6
Annual O&M costs	: Tzs 171,574,944
Annual water collections (Arrears included)	: Tzs 63,867,690
Annual water billings	: Tzs 149,688,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**
Consumption charge (**TZS/m3**)	500	550	600
Flat rate (Medium density) **TZS/month**	5,500	6,500	7,500
Flat rate (High density) **TZS/month**	3,900		

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan

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Challenges

1. Unreliability of water sources and low production.
2. Dilapidated distribution network and low coverage.
3. Unwillingness of customers to pay their water bills.
4. Lack of authority's office building and transport.
5. Lack of sufficient and qualified staff.

RUANGWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Ruangwa Urban Water Supply and Sanitation Authority was established by Act No. 8 of 1997 and came into operation in 2007. The utility is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Ruangwa township which is the headquarters of the Ruangwa District,Lindi Region. Ruangwa town has a current population of about 12,000 people of which 3,160 people are currently served. The water supply scheme for the Ruangwa town comprises one borehole that pumps its water to three storage tanks with total capacity of 225m^3. From these storage tanks, water is supplied to the township through a distribution network. The water supply scheme with almost all the appurtenances is aged pipeline network. The current installed capacity is 324m3/day while actual water production is about 263m^3/day catering for only 25% of the daily estimated water demand that stands at 1,026m^3/day. Although low daily water production is highly attributed to insufficient source capacity, which was reported to be 15m^3/hr, unreliable electricity supply posed a great obstacle to the water production, causing the pump to be operated at an average of only less than 5 hrs per day. The utility has neither water treatment facilities nor water quality monitoring plan ,although periodic quality monitoring is done by testing for water quality twice a year. The total length of the distribution system is 10km and water is supplied at an average of 5 hrs/day. The town has no sewerage system and onsite sanitation is monitored by the Ruangwa of District Council.

General Data About Water Utility

Total water connections	: 382
Total active connections	: 211
Total water kiosk/standpipe	: 15
Metering ratio	: 13%
NRW	: 30%
Total staff	: 11
Staff/1000 connections	: 28.8
Annual O&M costs	: TShs. 32,650,560
Annual water collections (Arrears included)	: TShs. 5,040,000
Annual water billings	: TShs. 8,424,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industries
Metered customers (**TShs/m3**)	500	500	500	500
Flat rate (**TShs/month**)	3,000	3,000	3,000	NA

Note1: The charges at water kiosks are TSHS. 20/= to 30/= per 20 litres jerrycan.

Challenges

1. Insufficient water sources leads to inadequate and unreliable water supply. 2. Poor billing system 3. Few connections and low metering. 4. High NRW as a result of aged pipeline network. 5. Inadequate qualified staff. 7. lack of transport facilities

RUJEWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Rujewa Township Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services for the Rujewa Township area which is the headquarters for the Mbarali District, Mbeya Region. Rujewa WSSA is classified as Category C water authority and started its operation in 2005. Its area of responsibility has a total population of 34,337 people of which 19,800 persons are served with water. The utility draws water from the Mbarali River (gravity scheme) located in the Igomelo Village, Mbarali District, about 14km from Rujewa town and two boreholes MB 277/2001 and MB 21/2002(drilled in 2001 and 2002 respectively), located at Uhamila area, Rujewa town. During the reporting period, the sources produced an average of 2,500m^3/day, which is less than the estimated daily water demand of 4,216m^3/day. Water supply is through rationing and the average hours of service are 6 hours.

The source installed production capacity is 2,500m^3/day. The utility has no water treatment facilities; as well as no water quality monitoring plan in use. The total length of the pipe network including the main and distribution lines is 47.4km. The Rujewa-WSSA has 9 storage tanks with total water storage capacity of 680m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Rujewa Township Authority. Rujewa WSSA has 21 employees with manning level of 15 staff per 1000 connections.

General Data About Water Utility

Total water connections	: 1,392
Total water kiosk/standpipe	: 144
Metering ratio	: 11%
NRW	: 33%
Total staff	: 21
Staff/1000 connections	: 15
Annual O&M costs	: TZS 39,874,593
Annual water collections (Arrears included)	: TZS 44,597,127
Annual water billings	: TZS 59,995,871

Tariff Structure

Category of customer	Band	Domestic	Institutional	Commercial	Kiosk
Consumption rate (**TZS/m^3**)	0– 4.5	250	500	500	250
	4.5-11	300	NA	NA	NA
	>11	500	NA	NA	NA
Flat rate (**TZS/month**)	NA	3000-4000	10000	10000	NA

Challenges

1. Old and worn-out pipe network resulting into frequent bursts and leakages.
2. Limited network coverage.
3. High NRW.
4. Lack of sufficient and qualified staff.
5. Lack of water treatment facilities.
6. Lack office building and transport facilities.

SAME **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Same Urban Water Supply and Sanitation Authority (SAUWASA) was declared a fully autonomous public water utility in 2003, and is responsible for the overall operation and management of water supply and sanitation services within the Same urban area which is the headquarters of the Same District, Kilimanjaro Region. SAUWASA is classified as Category C water authority. Its area of responsibility has a total population of 25,000 people of which 17,000 persons are currently served. The utility draws water from two small spring sources of *Same* and *Mahuu* and three deep boreholes. The installed production capacity is 2,544m^3/day. Maximum production from the sources is experienced during the rainy season. The average production of 1,193m^3/day is far below the estimated demand for the township, of 4,500m^3/day. The total length of the distribution system is 160 km and water is supplied at an average of 6 hrs. There is no water treatment plant in place; however, the quality of the produced water is claimed to be safe owing to high protection of the sources. The distribution system has 10 storage tanks with total capacity of 1013m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Same District Town Council. SAUWASA has 18 employees with a deficiency of 8 employees of different professions and qualifications.

General Data About Water Utility

Total water connections	: 1,188
Total active connections	: 1,125
Total water kiosk/standpipe	: 34
Metering ratio	: 68%
NRW	: 35%
Total staff	: 18
Staff/1000 connections	: 15
Annual O&M costs	: Tzs 162,746,018
Annual water collections (Arrears included)	: Tzs 138,778,712
Annual water billings	: Tzs 157,287,550

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption (**TZS/m3**)	750	1,500	1000	1,500
Flat rate **TZS/month**	5,000	NA	NA	NA
Service **TZS/month**	1,000	2,000	2,000	2,000

Note: The charges at water kiosks are TZS 14 per 20 litres jerrycan.

Challenges

1. Inadequate water sources to meet the growing population and increasing water demand.
2. High number of illegal connections.
3. Attainment of universal metering.
4. Lack of capital fund for extension and rehabilitation of pipe networks.
5. Lack of office building and transport for the authority.
6. Lack of sufficient and qualified staff.

SENGEREMA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Sengerema Urban Water Supply & Sewerage Authority (SEUWASA) was declared a fully autonomous public water utility in 2003 and is responsible for overall operation and management of the water supply and sanitation services within the Sengerema urban area, which is the headquarters of the Sengerema District, Mwanza Region. SEUWASA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 60,624. The utility draws water from Lake Victoria, with a total production capacity of 3,240m^3/day which is insufficient compared with the estimated water demand of 4,831m^3/day. Water is supplied through rationing at an average of 7 hrs. The system has 4 storage tanks with a storage capacity of about 2,175m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Sengerema District Town Council. SEUWASA has 28 employees.

General Data About Water Utility

Total water connections	: 2,200
Total active connections	: 1,600
Total water kiosk/standpipe	: 66
Metering ratio	: 34.8%
NRW	: 52%
Total staff	: 28
Staffs/1000 connections	: 12.7

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	500	500	500	NA
Flat rate charge (**TZS/Month**)	5,000	25,000	35,000	NA

NOTE: The charges at water kiosks are TZS 10 per 20 litres jerrycan.

Challenges

1. Low metering as most of the customers are not metered.
2. High NRW.
3. Lack of qualified, experienced and adequate staff.
4. Insufficient water production as compared to demand.

SIKONGE **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Sikonge Urban Water Supply & Sewerage Authority (Sikonge-WSSA) was declared a fully autonomous public water utility in 2004 and is responsible for overall operation and management of water supply and sanitation services within the Sikonge township, Sikonge District, Tabora Region. Sikonge-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 12,640 of which only 3,480 people are served by the Sikonge WSSA. The utility draws water from two kinds of water sources, namely shallow wells and an earth fill dam called Utyatya dam, which at the time of construction in 1959, had a total production capacity of *1,890.4m^3/day* very sufficient compared with the estimated water demand of *526m^3/day*. In the year 2009/2010, the water production from the dam and the shallow well averaged 180 *m^3/day* . Raw water from the Utyatya dam is pumped using low lift pumps into the water treatment plant, which has a capacity of 340 *m^3/day*. The total length of the distribution pipeline system is 10.785km. Water is supplied through rationing at an average of 5 hrs. The system has 3 storage tanks, but only one tank is in use, the capacity of which is 135m^3. The town has no sewerage system; onsite sanitary facilities are in use under the Sikonge District Council. The utility is served by 15 employees; 9 permanent and 5 daily paid labourers.

General Data About Water Utility

Total water connections	: 259
Total active connections	: 259
Total water kiosk/standpipe	: 12
Metering ratio	: 33%
NRW	: 40
Total staff	: 15
Staff/1000 connections	: 58
Annual O&M costs	: Tzs 60,248,597.25
Annual water collections (Arrears included)	: Tzs 35,530,407.00

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	800	900	900	NA
Flat rate charge (**TZS/month**)	5,500	25,125	6,750	NA

Challenges

1. Low Metering ratio
2. Low production capacity in comparison with the town demand.
3. Lack of adequate working tools and equipment.
4. Low coverage.

SONGE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Songe Township Water Supply and Sanitation Authority (SOWASA) was declared a fully autonomous public water utility in 2004 and is responsible for the overall operation and management of water supply and sanitation services in the Songe Township which is the headquarters of the Kilindi District, Tanga Region. SOWASA is classified as Category C water authority. Its area of responsibility has a total population of 14,000 people of which 9,225 persons are currently served. The utility draws water from two ring wells, located near the Songe River valley, and the Kwidibuti springs originating from the Nkama Mountain. Both sources have combined installed production capacity of 265m^3/day. The installed production capacity is not sufficient to meet the estimated demand for the township of 494m^3/day. The total length of the pipe network is 12.54 km and water is supplied at an average of 7 hrs. There are 2 storage tanks which have combined storage volume of 165m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Kilindi District Council. SOWASA has 8 employees and a deficiency of 10 employees.

General Data About Water Utility

Total water connections	: 54
Total water kiosk/standpipe	: 30
Metering ratio	: 48%
NRW	: 36%
Total staff	: 8
Staff/1000 connections	: 129
Annual O&M costs	: Tzs 30,000,000
Annual water collections (Arrears included)	: Tzs 33,600,000
Annual water billings	: Tzs 40,992,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**
Consumption rate (**TZS/M^3**)	1200	1500	2000
Flat rate(**TZS/month**)	6,000	15,000	10,000

Note: The charges at water kiosks are TZS 30 per 20 litres jerrycan.

Challenges

1. Lack of sufficient water sources and production to meet demand.
2. Capital fund for major rehabilitation of old and dilapidated distribution network.
3. Lack of qualified and competent staff.
4. Lack of transport facilities for operation and maintenance activities.

TARIME **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Tarime Urban Water Supply and Sewerage Authority (TARUWASA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Tarime Urban area which is the headquarters of the Tarime District, Mara Region. TARUWASA is classified as Category C water authority. Its area of responsibility has a total population of 53,067 people of which 11,750 people are currently served. The utility draws water from two water sources, a spring named Nyandurumo and a dam named Tagota. The sources have altogether, total installed production capacity of 8,502m^3/day .The present production capacity is sufficient compared with the estimated water demand of 4,142.5m^3/day. The total length of the pipeline system is 17.6km out of which 12.38km is distribution and the remainder is rising/gravity lines. Water is supplied through rationing at an average of 9 hrs. The system has 4 storage tanks with a combined capacity of 900m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Tarime Town Council. TARUWASA has 3 employees and 12 daily paid staff of different qualifications and professions.

General Data About Water Utility

Total water connections	: 704
Total active connections	: 451
Total water kiosk/standpipe	: 0
Metering ratio	: 56.4%
NRW	: 63.5%
Total staff	: 15
Staffs/1000 connection	: 21.3
Annual O&M costs	: Tzs 50,256,350
Annual water collections (Arrears included)	: Tzs 74,239,000
Annual water billings	: Tzs 90,361,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	500	500	500	NA
Flat rate charge (**TZS/Month**)	4,500	6,000-100,000	6,000-100,000	NA

Note: The charges at water kiosks are TZS 10 per 20 litres jerrycan.

Challenges

1. Revenue collections do not meet operation costs.
2. Distribution network coverage is small, no network for 75% of the town.
3. Lack of transport facilities.
4. High NRW.
5. The Authority is understaffed.
6. Low production compared to demand

TUKUYU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Tukuyu Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2002 and is responsible for the overall operation and management of water supply and sanitation services within the Tukuyu Town which is the headquarters of the Rungwe District, Mbeya Region. Tukuyu WSSA is classified as Category C water authority which started its operation in 2004. Its area of responsibility has a total population of 31,090 people of which 18,110 persons are served with water. The main water sources for the Tukuyu town are Masalala spring and Mlagala stream (gravity schemes) located about 9km and 12km respectively from the town. The sources produced an average of 5,004m^3/day during the reporting period 2009/10 which is above the present estimated water demand of 3,561 m^3/day. However, the excess production does not benefit the population of the Tukuyu town due insufficient storage facilities, leakage in the network-bursts and breakdown and direct tapping from the gravity main.

The combined installed production capacity is 3,586m^3/day. The utility has no water treatment facilities. However, water quality testing is done quarterly and the water sources are well protected. The total length of the entire pipe network is 81.652km and water is supplied through rationing at an average of 19 hrs. The network has 4 storage tanks with combined storage volume of 812m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Rungwe District Council. Tukuyu WSSA has 19 employees with a deficiency of 3 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 3,522
Total active connections	: 3,448
Total water kiosk/standpipe	: 3
Metering ratio	: 46%
NRW	: 47%
Total staff	: 19
Staff/1000 connections	: 5.4
Annual O&M costs	: TZS 196,300,312
Annual water collections (Arrears included)	: TZS 140,981,891
Annual water billings	: TZS 156,169,590

Tariff Structure

Category of customer	Domestic	Large Institutions	Small Institutions	Commercial	Industrial
Metered (**TZS/m3**)	200	300	250	300	300
Flat rate (**TZS/month**)	2,000	NA	6,000	5,000	NA

Kiosk Tariff is TZS 20 per 20 litres jerrycan

Challenges

1. High NRW.
2. Old pipe networks leading to high leakages and frequent bursts.
3. Low tariff set-up.
4. Insufficient storage facilities.
5. Lack of transport facilities.
6. Lack of sufficient and qualified staff.

TUNDURU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Tunduru Urban Water Supply and Sanitation Authority (TUUWASA) was established by Act No. 8 of 1997 on 30th January, 2004. TUUWASA is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Tunduru township which is the headquarters of the Tunduru District,Ruvuma Region. Currently its area of operation has a total population of 38,384 while the population served is 19,250 people. The TUUWASA water supply scheme has its sources from springs, streams and boreholes. The first scheme was constructed in the year 1953 with water from the Mlingoti pumping station which is still in use. Later, new sources were constructed to meet the growing demand of the town. The current scheme has three types of sources, Nanjoka Spring source, five boreholes sources, and Mlingoti Stream sources. The current average water demand for this town is estimated to be 2,571m^3 per day while the total water production is 1,188m^3/day from all its sources (When there is electricity) and 348m^3/day only when there is no electricity (water from gravity scheme source only). This capacity it is not fully utilized owing to dilapidated distribution network and un-rehabilitated schemes. The utility does not have its own office, but is using two rooms in the DWE's office building. The utility has no water treatment facilities and also water quality monitoring plan is not in place. The total length of the distribution system is 23.1km and water is supplied at an average of 8 hrs/day. They have 5 storage tanks with a total capacity of 370m^3. There is no water quality monitoring done. The town has no sewerage system and onsite sanitation is monitored by the Tunduru District Council.

General Data About Water Utility

Total water connections	: 836
Total active connections	: 630
Total water kiosk/standpipe	: 8
Metering ratio	: 30%
NRW	: 50%
Total staff	: 7
Staff/1000 connections	: 8.4
Annual O&M costs	: TShs. 57,356,069
Annual water collections (Arrears included)	: TShs. 29,924,393
Annual water billings	: TShs. nm

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Metered: 0 – 5m3 (**TShs/month**)	500	500	550	700
Metered: 5 – 10m3 (**TShs/month**)	550	500	550	700
Metered: above 10m3 (**TShs/month**)	600	500	550	700
Flat rate (**TShs/month**)	3,500	10,000	10,000	15,000

Note: The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. Insufficient and unreliable water sources. 2. Low network coverage. 3. Inadequate qualified staff. 4. Need for rehabilitation and replacement of pipeline network. 5. Low metering ratio. 6. Lack of reliable transport facilities. 7. High NRW caused by leakages

USHIROMBO **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Ushirombo Urban Water Supply and Sewerage Authority (Ushirombo-WSSA) was declared a fully autonomous public water utility in 2003, and is responsible for the overall operation and management of water supply and sanitation services within the Ushirombo Urban area which is the headquarters of the Bukombe District, Shinyanga Region. Ushirombo-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 43,570 of which 7,200 persons are currently served. The utility draws water from one borehole with a production capacity of 71m^3*/day* which is insufficient compared with the estimated water demand of 3,253m^3*/day*. The total length of the pipeline system is 1.24km of rising main and 2.7km of distribution network. Water is supplied through rationing at an average of 17 hrs. The system has 1 storage tank with a storage capacity of 45m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Bukombe District Council. Ushirombo-WSSA has 6 employees, 3 permanent and 3 on contract.

General Data About Water Utility

Total water connections	: 34
Total active connections	: 34
Total water kiosk/standpipe	: 6
Metering ratio	: 100%
NRW	: 20%
Total staff	: 6
Staff/1000 connections	: 150
Annual O&M costs	: Tzs 20,876,969
Annual Water collections	: Tzs 8,995,569.65
Annual Water billings	: Tzs 6,902,120.45

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	1,500	1,500	1,500	NA
Flat rate charge (**TZS/Month**)	-	-	-	-

Note: The charges at water kiosks are TZS 30 per 20 litres jerrycan.

Challenges

1. High production cost associated with generators running cost (diesel cost).
2. Bill settlement, customers not paying in time.
3. Lack of adequate transport facilities.
4. Low coverage, only 16% of the town is covered/has network.
5. High cost of pipes and fittings hindering affordability of new applicants to get connected.

UTETE **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Utete Urban Water Supply and Sanitation Authority (UTEUWSA) was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services within the Utete urban area which is the headquarters of the Rufiji District, Coast Region. UTEUWSA is classified as Category C water authority. Its service area has a total population of 9,353 people in which 7,001 persons are served. The present water source is lake Lugongwe that has installed production capacity of 613m^3/day .The installed production capacity is sufficient to meet the present estimated demand of 611m^3/day. However the current production of 405m^3/day cannot meet the demand. The total length of the distribution system is 10.05 km and water is supplied through rationing at an average of 5 hrs. The system has 2 storage tanks with combined total storage capacity of 550m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Rufiji District Council. UTEUWSA has 11 employees and the total number of staff required has not been established.

General Data About Water Utility

Total water connections	: 430
Total water kiosk/standpipe	: 32
Metering ratio	: 0%
NRW	: 50%
Total staff	: 11
Staff/1000 connections	: 26
Annual O&M costs	: Tzs 50,596,680
Annual water collections (Arrears included)	: Tzs 6,459,500
Annual water billings	: Tzs 12,365,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industry**
Consumption charge (**TZS/m3**)	NOT SET	NOT SET	NOT SET	NOT SET
Flat rate **TZS/Month**	5000-30,000	30,000-60,000	15,000-60,000	NA

Note:

1. The charges at water kiosks are TZS 20 per 20 litres jerrycan.
2. The tariff for metered customers is not yet set as there is no metered customers.

Challenges

7. High NRW.
8. Lack of water treatment facilities.
9. Lack of sufficient and qualified staff.
10. Metering of customers.

URAMBO **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Urambo Urban Water Supply and Sewerage Authority (URUWASA) was declared a fully autonomous public water utility in 2005, and is responsible for the overall operation and management of water supply and sanitation services within the Urambo Urban area which is the headquarters of the Urambo District, Tabora Region. URUWASA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 35,936 of which 10,062 persons are currently served. The utility draws water from four deep boreholes, with a total production capacity of *436.8m^3/day* which is insufficient compared with the estimated water demand of *1,261m3/day*. An average of *183m^3/day* of water was produced in the year 2009/2010. The total length of the pipeline system is 44km. Water is supplied through rationing at an average of 3.25 hrs. The system has 4 storage tanks with a storage capacity of 570m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Urambo District Town Council.

General Data About Water Utility

Total water connections	: 124
Total active connections	: 121
Total water kiosk/standpipe	: 21
Metering ratio	: No Data
NRW	: No Data
Total staff	: 11
Staff/1000 connections	: 92
Annual O&M costs	: Tzs 15,282,800
Annual water collections (Arrears included)	: Tzs 14,476,845
Annual water billings	: Tzs 13,172,600

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	700	700	700	-
Flat rate charge (**TZS/month**)	5,000	10,000	10,000	-

Note: The charges at water kiosks are TZS 25 per 20 litres jerrycan.

Challenges

1. Low coverage of distribution network.
2. Lack of qualified staff.
3. Small customer base.
4. Low production as compared to demand.

VWAWA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Vwawa Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services for the Vwawa Town which is the headquarters of the Mbozi District, Mbeya Region. Vwawa WSSA is classified as Category C water authority. Its area of responsibility has a total population of 46,835 people of which 19,830 persons are served with water. The utility draws water from four sources namely Panahalanga pumping scheme, Mantengu pumping scheme and Mgombezi/Nalaba gravity scheme. The average water production from the sources during the reporting period was 1,547m^3/day.

The combined installed production capacity is 1,862m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 2,874m^3/day. The utility has no water treatment facilities in place. The total length of the entire pipe network is 28.08km and water is supplied through rationing at an average of 10 hrs. The network has 8 storage tanks with combined capacity of 725m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Mbozi District Council. Vwawa WSSA has 10 employees with a deficiency of 5 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 948
Total active connections	: 872
Total water kiosk/standpipe	: 98
Metering ratio	: 25%
NRW	: No data
Total staff	: 10
Staff/1000 connections	: 11
Annual O&M costs	: TZS 54,248,344
Annual water collections (Arrears included)	: TZS 41,378,368
Annual water billings	: TZS 40,680,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Kiosks**
Metered (**TZS/m^3**)	350	350	350	
Flat rate (**TZS/month**)	4,500	10,000	10,000	12,000

Challenges

1. Inadequate water production to meet the water demand.
2. Low metering ratio.
3. Insufficient production capacities.
4. Water quality does not meet TBS standards.
5. Limited pipe network coverage.
6. Old infrastructure causing frequent breakdown.

BASHNET	PROFILE AS PER 2009/10 DATA
General Description About the Utility	BASHNET is one of the small towns in the Babati district council located about 47km from the Babati Town along the Babati-Mbulu Road. BASHNET township was gazetted and declared an area of urban water supply in, 2004. To date, the Town Water Board is yet to be established. There is recognized water committee established in March 2010 responsible for the provision of water supply services of the township. The committee is responsible for protection of the water sources and water supply infrastructures.. The township covers three villages, namely Bashanet, Long and Gabadau which have a population of 10,557 people with an estimated water demand of 422.3m^3/day. The township water supply depends on 3 spring sources which were developed by the Catholic Diocese of Mbulu Development Department (DMDD) in 1997. The spring includes Bashnet Saria, Dawite and Tlagami. Only one spring source of Bashnet Saria is operational while the rest have technical problems. The three sources of operation have combined capacity of 334.785m^3/day.The current water production from operating Bashnet Saria spring stood at 274.992m^3/day. The length of the gravity main and distribution line is estimated at 13.896km. The town has one 90m^3 blockwork storage tank located in the Bashnet center and 4 small storage tanks of 5m^3 each with public taps along the gravity main. Water was previously considered as a gift from God and was provided as a free social service. Currently, the established water committee has started charging for water services.
General Data About Water Utility	Total water connections : 40 Total active connections : 40 Total water kiosk/standpipe : 2 Metering ratio : 100% Total staff : 6 Staff/1000 connections : 143 Average monthly expenditure : Tzs 1,300,000 Average monthly collections : Tzs 550,000

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Kiosk**	
Consumption charge (**TZS/m3**)	1000	1000	2500	

Challenges

1. Unwillingness of the people to establish water board that will charge for water service.
2. Changing the community's traditional belief of recognizing water as gift from God and a free social service.
3. Inadequate water supply sources for the increasing water demand.
4. Lack of fund for rehabilitation of the old water supply scheme as well as expansion of uncovered areas.

BONGA	PROFILE AS PER 2007/08 DATA
General Description About the Utility	BONGA is a small town located within the Babati Town Council about 16km from Babati Town center.Bonga township was gazetted and declared an area of urban water supply in 2004. To date, the Town Water Board is yet to be established. There is not any recognized water committee/group responsible for the provision of water supply services for the township. The establishment of the Town Water Board had been delayed owing to acute water shortage in the township due to unavailability of reliable water sources, while the existing water supply infrastructures is inadequate, old and dilapidated. Water is considered as a free social service in the township. The total population of the township is approximately 7,494 people while demand is estimated to be 299.7m3/day. The Township water supply depends on one gravity scheme and two shallow wells. The gravity scheme receives water from the Yaer Matse intake constructed in 1964 on the Dawar stream. Dawar is a perennial stream formed by springs originating from the Bereko hills. The source capacity is not yet established. Further, the town has three shallow wells of which only two are functioning. The yields of these shallow wells are not known owing to absence of its historical data in the Babati Town Council. The township has one blockwork storage tank ($90m^3$) located at the Bonga town center. The tank was seriously leaking, thus it has not been in use since April, 2008. The tank used to receive water from the Yaer Matse intake and distribute it to the Bonga, Dawar and Waang-Boo streets.
General Data About Water Utility	NIL
Tariff Structure	Water service is free
Challenges	1. Lack of reliable water sources and associated water supply infrastructures. 2. Lack of fund for rehabilitation of the existing scheme as well as expansion to uncovered areas. 3. Lack of competent staff. 4. Lack of the community know-how of the functioning of the Town Water Board and the water supply authority.

CHALA	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Chala Township Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services for the Chala township area which is located in the Nkasi District, Rukwa region. Despite being gazetted, the utility water board and management are not yet established. Process for the establishment of the board is still ongoing .Management of water services in the town is under village water committees for the three villages which form the Chala Town (Chala A, Chala B and Chala C). Each committee is responsible for operation of water supply services in its respective village. The water committees are generally not active. According to the 2002 Population Census, the Chala town had a population of 10,048.The current population is estimated to be 13,952 while the number of people receiving water services is 6,976.The estimated water demand is 439.66m^3/day. Water sources for the Chala town are the Chala earth dam which is a gravity scheme and three boreholes. The three (3) boreholes are fitted with hand pumps and there is no data on the yield from the operating borehole. The average water production from the dam is estimated to be 956m^3/day while the average water demand for this town is estimated to be 440m^3/day. Water production during the dry season, occurring in the months of October and November, is approximately 64m^3/day. The distribution network has 1 storage tank of capacity 225m^3. The town has no sewerage system; onsite sanitary facilities are in use under the supervision of the Nkasi District Council.
General Data About Water Utility	Total water connections : 62 Total water kiosk/standpipe : 29 Metering ratio : 0% Total number of staff : 1
Tariff Structure	**Water service is provided for free**
Challenges	1. Establishment of water board and management to run the utility. 2. Poor management of the existing water infrastructure. 3. Addition of water storage tanks. 4. High water losses.

DAREDA **PROFILE AS PER 2007/08 DATA**

General Description About the Utility

DAREDA is a small town in the Babati District Council located about 26km from the Babati Town along the Babati-Mbulu Road. DAREDA township was gazetted and declared an area of urban water supply in January, 2004. To date, the Town Water Board is yet to be established. The day-to-day activities of water supply services are under the water committees. There are no formal organization structures in place for the water committees; however, they are responsible to the respective village government through the Villages Executive Officers (VEO). The township has a total population of 17,166 people and an estimated water demand of 686.6m^3/day.

The main water supply sources are the Galau intake located at the Galau River in Seloto village, Endalaa river intake located in Dareda Kati village, and Hantsi spring intake located in Belmi village. Other small sources are the Kwambrosy and Sagday springs located in the Belmi and Seloto villages respectively. The production capacities of the sources have not being established; however, rough estimation indicated that the sources have sufficient production to meet the water demand of the township. The town has five blocks storage tanks which have combined capacities of 427.5m^3. There are 292 private water connections and 33 public water points in the town, all being un-metered. Water is for free at all public water points.

General Data About Water Utility

Total water connections.	: 292
Total water kiosk/standpipe.	: 33
Metering ratio.	: 0%
NRW.	: Unknown

Tariff Structure

Village Name	**Dareda Kati**	**Haysam**	**Belimi**	**Seloto and Loto**
Flat rate charge (**TZS/month**)	2000	2000	1500	3000

Note: The charges at water kiosks: free

Challenges

1. Establishment of the Town Water Board.
2. Lack of skilled staff (technicians) in the District Council to establish the Town Water Board.
3. Changing the community's traditional belief of recognizing water as a gift from God and a free social service.

DIDIA	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Didia Urban Water Supply & Sewerage Authority (Didia-WSSA) was declared a fully autonomous public water utility in 2005, and is responsible for overall operation and management of water supply and sanitation services within the Didia township Ward, Itwangi Division, Shinyanga rural District, Shinyanga Region. Didia-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 2,136. Currently,the water board and management have not been established. People in the service area are getting water through 3 shallow wells fitted with hand pumps and one borehole owned by the Don Bosco Secondary School. The sources yield had not be established; the estimated water demand of the Didia township Ward is 148.6m^3/*day*. These shallow wells are managed and operated by Private owners. There is no water supply infrastructure with the exception of shallow wells.
General Data About Water Utility	No operational data has been established to date.
Tariff Structure	**NOTE:** Water vendors sell water to consumers at a price of TZS 200- 300 per *20 litres bucket*
Challenges	1. No operational Water Board and Management in place. 2. With the exception of shallow wells, no water supply infrastructure in place. 3. The water supplied from the shallow wells is of poor quality. 4. Vendors re-sell water at an expensive price of *Tshs* 200-300 per 20 litre bucket.

GAIRO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

The Gairo Urban Water Supply Authority is a small town Water Supply Utility under category C located at the Gairo Township in the Kilosa District that was establish and gazetted on 17/12/2003 by the then Ministry of Water and Livestock Development. The Authority became operational in August, 2004. After establishment of the utility, the management had set the objective as being to ensure production and delivery of clean, safe, and reliable water supply and sanitation services to the people. The scheme has an estimated population of 85,615 (including villages and town centre) but the utility supplies water to a total of 12,082 people residing along the main pipeline from the source to the Gairo town. There is only one water source for the Gairo town which is the Mahelo spring intake (gravity scheme), originating from the Ukaguru mountains range. The source produces an average of between 734.4m3/day during the wet season and 302.4m3/day during the dry season (September, October and November) which is 12.1% - 29.4% of the present estimated daily water demand of 2,495m3/day. The reported NRW is 40% while water supply is through rationing whereas the average hours of service are 8 hours. The Water supply system to the storage tanks from the Mahelo spring intake is a gravity system through the raising main of PVC and Galvanized steel Pipe of 3"-8'' diameter range. There are 7 concrete blocks tanks with total storage capacity of 545m3 located at various locations along the main pipeline from the Mahelo source to the Gairo town. Four tanks are not in good condition, as they are leaking owing to aging repair and, in addition they are insufficient for the present supply. The distribution network for water supply at the township is not in very good condition owing to old pipes, constructed between 1965 and 1972 hence frequent leakages and bursts are common events.

General Data About Water Utility

Total water connections	: 174
Total active connections	: 174
Total water kiosk/standpipe	: 149
Metering ratio	: 2%
NRW	: 50%
Total staff	: 14
Staff/1000 connections	: 80.5
Annual O&M costs	: TShs. 25,479,590/=
Annual water collections (Arrears included)	: TShs. 28,190,000/=
Annual water billings	: TShs. nm

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industries**
Metered customers (**TShs/m3**)	300	1,500	-	-
Flat rate (**TShs/month**)	2,500	10,000	10,000	10,000

Note: The charges at water kiosks are TSHS. 20 per 20 litres jerrycan.

Challenges

1. The top Managerial vacancies and other professional posts to be filled with qualified personnel so as to rise staffing to the required level. 2. The Utility should allocate in their budget some funds for procurement and installation of manual chlorine dosing equipment to rectify the poor bacteriological conditions of water supplied. 3. To install bulk meters at the intake source and storage reserves to measure the amount of water produced. 4. A substantial investment is required for a better performance of the Authority. 5. Water quality monitoring program should be practiced. 6. Preventive and corrective maintenance schedule and guidelines to be instituted.

GALLAPO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

GALLAPO is a small town in the Babati district council located about 22km from the Babati Town. The township includes all villages in the Gallapo ward which namely Ayamango, Gallapo, Endanoga and Gedamar. The total population of the township is 19,013 people with an estimated water demand of 475.3m3/day.

The GALLAPO town was gazetted and declared an area of urban water supply since 2004. The Town Water Board is yet to be established. However, water supply services of the township are currently under temporay Water Board with 10 members. Nominees for the permanent Water Board had being forwarded to the responsible Ministry for approvals..

The township water supply depends on three water sources, namely the Halla, Gedamar and Enganoga streams. The production capacity of the sources is estimated at 1250m^3/day. The installed capacity is not sufficient to meet the estimated water demand of 2000m^3. The same sources are also utilized by the Hala village which is not part of the Gallapo Township. The entire water supply network has approximately 89km comprising G.S, uPVC and HDPE pipes of diameter ranging from 150mm to 25mm. The Gallapo Water Supply Scheme has two block work storage tanks with combined storage volume of 360m^3.

General Data About Water Utility

Total water connections	: 945
NRW	: 60%
Average monthly collection	: 1,600,000
Average monthly expenditure	: 2,000,000

Tariff Structure

Category	**Domestic**	**Institutional**	**Commercial**	**Kiosk**
Flat rate charge (**TZS/month**)	3,000	5000	8,000	Tzs 10 for 20litres

Challenges

1. Unwillingness of the people to establish Town Water Board.
2. Community acceptability of universal metering.
3. Inadequate water supply to meet the growing population and increasing water demand.
4. Lack of fund for establishing new sources and expansion of the same to uncovered areas.
5. Old and dilapidated pipe network

ILULA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Ilula Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services for the Ilula township area which is located in the Kilolo District, Iringa region. Despite being gazetted the water utility board and management in the Ilula town are not yet established. Process for the establishment of the board is ongoing .The day-to-day operational activities of water supply to Ilula town are managed by a water committee with backstopping from the Kilolo District Water Engineer's office. The Water Committee has identified four individuals who are working on a full time basis for operation of the water supply scheme. These are the committee secretary who acts like a manager, Accounts clerk, Plumber and Billing Clerk. The Water Committee has an office located within the Ilula town. This town had a population of 39,994 and the number of people living in area with water service is 16,398.The estimated water demand for the town is 2,800m^3/day.

The Ilula utility draws water from two water sources, namely Idemule and Ilomba, both of which are streams. The Idemule stream intake is located in the Mazombe Village which is about 15kms from the Ilula Town, while the Ilomba stream intake is located in the Imarutwa Village which is about 12.3kms from the Ilula Town. The combined installed production capacity is 820.8m^3/day. Water from the Idemule and the Ilomba intakes is transmitted by gravity to the storage tanks.

There are six (6) storage tanks for the Ilula Town Water Supply with total storage capacity of 350m^3. Three(3) of the storage tanks have a capacity of 45m^3 each, while one(1) has capacity of 5m^3 and each of the remaining two(2) tanks have a capacity of 105m^3. The average hours of service are estimated at 8.5 hrs. Water is supplied to the Ilula town residents without any form of treatment.

The town has no sewerage system; onsite sanitary facilities are in use under the support of the Kilolo District Council.

General Data About Water Utility

Total water connections	: 326
Total water kiosk/standpipe	: 20
Metering ratio	: 0%
Annual O&M costs	: TZS 12,008,870
Annual collection from water sales	: TZS 38,425,000
Annual water billing	: TZS 34,980,000

Tariff Structure

Category of Customer	**Domestic**	**Institutional**	**Commercial**	**Kiosk**
Flat rate (**TZS/Month**)	3,000	5,000 – 20,000	7,000 – 30,000	30

Challenges

1. Poor management of the existing water infrastructure.
2. Metering customers.
3. High water losses.
4. Low water production compared to water demand.
5. Lack of transport facilities.
6. Low pipe network coverage.

ISAKA **PROFILE AS PER 2007/08 DATA**

General Description About the Utility

Isaka Urban Water Supply & Sewerage Authority (Isaka-WSSA) was declared a fully autonomous public water utility in 2006, and is responsible for the overall operation and management of water supply and sanitation services within the Isaka township, Kahama District, Shinyanga Region. Isaka-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 21,596. The utility draws water from the Nhumbi deep borehole which has a total production capacity of 480m^3/day which was insufficient compared with the estimated water demand of 1,137m^3/day, but currently, the daily production is 51 m^3/day. The total length of the distribution pipeline system is 6km. Water is supplied through rationing at an average of 8 hrs. The system has 1 storage tanks with a storage capacity of about 90m^3. The town has no sewerage system; presently, onsite sanitary facilities are in use under the Kahama District Council. The utility is served by 1 employee, employed by the District Council, the day-to-day water supply operations have been contracted to WEDECO, a private company.

General Data About Water Utility

Total water connections	: 86
Total active connections	: 72
Total water kiosk/standpipe	: 7
Metering ratio	: 100%
NRW	: 26%
Total staff	: 1
Staffs/1000 connection	: NA
Annual O&M costs	: Tzs 15,543,840.
Annual water billings	: Tzs 22,295,700

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial
Consumption charge (**TZS/m3**)	1,000	NA	1,000	NA

NOTE: The charges at water kiosks are TZS 20 per 20litres jerrycan

Challenges

1. Lack of staff, only one member of staff.
2. Small customer base.
3. Small storage capacity.
4. Low coverage.
5. Decreased production capacity.
6. Lack of reliable and permanent water sources.

ISELAMAGAZI	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Iselamagazi Urban Water Supply & Sewerage Authority (Iselamagazi-WSSA) was declared a fully autonomous public water utility in 2004, and is responsible for overall operation and management of water supply and sanitation services within the Iselamagazi township ward, Shinyanga District, Shinyanga Region. Iselamagazi-WSSA is classified as Category C water authority. Currently, there is neither Water Authority nor Water Board at Iselamagazi .The area has an estimated total population of 5,031people. People in the service area are getting water through 2 storage tanks with capacity 160m^3 each, which receives water from the Kahama-Shinyanga Water Supply Project. The estimated water demand of the Iselamagazi township is 273m^3/day. These storage tanks are managed and operated by Water Committees, each with seven members. There is no water supply infrastructure with the exception of storage tanks.
General Data About Water Utility	No operational data has been established to date.
Tariff Structure	**NOTE:** The water tariff is *Tshs* 20 per 20 litres bucket.
Challenges	1. No operational water Board and Authority is in place. 2. With the exception of storage tanks, no water supply infrastructure is in place.

JOMU/TINDE	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Jomu/Tinde Urban Water Supply & Sewerage Authority (Jomu-WSSA) was declared a fully autonomous public water utility in 2005, and is responsible for overall operation and management of water supply and sanitation services within the Tinde Ward, Shinyanga rural District, Shinyanga Region. Jomu-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 5,900 people. Currently the water board and management have not being established. People in the service area are getting water through 7 shallow wells fitted with hand pumps of which the yield could not be established; the estimated water demand of the Tinde Ward is 340m^3/*day*. These shallow wells are managed by the Water User Groups (WUGs). There is no water supply infrastructure with the exception of shallow wells, although Glinaker, the contractors for the Shinyanga-Nzega road, drilled four boreholes one of which was developed and found to have a yield of 6.6m^3/*hr*, the borehole will be used by a secondary school. Of the remaining three, one was observed to have a ground water utilization potential but the other two did not.
General Data About Water Utility	No operational data has been established to date.
Tariff Structure	**NOTE:** Water is charged to water vendors, who collect water from the shallow wells by using push carts, according to the size of the push carts; the price ranges from *Tshs/day* 500-Tshs 700 per one pushcart.
Challenges	1. No operational Water Board and Authority is in place. 2. With the exception of shallow wells, no water supply infrastructure is in place. 3. The water supplied from the shallow wells is of poor quality. 4. Vendors resell water at an expensive price of *Tshs* 200 per 20 litre bucket.. 5. WUGs undermine efforts to utilize the boreholes drilled by Glinaker Contractors for their own benefit.

KASUMULU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Kasumulu Urban Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2005, and is responsible for the overall operation and management of water supply and sanitation services within the Kasumulu township area which is a small town in the Kyela District,Mbeya Region. Kasumulu WSSA is classified as Category C water authority and started its operation in 2007. Its area of responsibility has a total population of 11,217 people of which 6,505 persons are served with water. The utility draws water from the gravity scheme, Mwega intake located at the Landani village,Ileje District about 15kms from the Kasumulu town. The same scheme also serves other several villages which are located downstream of the source. Water from the source gravitates to the served villages including Kasumulu whereby each village has its own tank. The estimated average water produced from the sources during the reporting period was 342m^3/day.

The installed production capacity is 1,203 m^3/day .Water supplied to the Kasumulu town is not sufficient to meet the estimated water demand of 967m^3/day. There are neither water treatment facilities nor water quality monitoring programme. The total length of the entire pipe network is 20.97 km and water is supplied at an average of 6 hrs per day. The network has 1 storage tank with storage volume of 90m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Kasumulu township Authority. Kasumulu WSSA has 8 employees with a deficiency of 2 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 649
Total active connections	: 562
Total water kiosk/standpipe	: 25
Metering ratio	: 0%
NRW	: 35%
Total staff	: 8
Staff/1000 connections	: 12
Annual O&M costs	: Tzs 18,711,770
Annual water collections (Arrears included)	: Tzs 18,932,550
Annual water billings	: Tzs 23,207,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Industrial	Kiosk
Metered (**TZS/m^3**)	350	400	500	600	NA
Flat rate charge (**TZS/month**)	3,000	4,500	6,000	10,000	NA

Challenges

1. Metering of customer connections.
2. Development of a sustainable and reliable water source for the current and future water demand.
3. Limited network coverage.
4. Lack of office building and transport.
5. Lack of sufficient and qualified staff.

LAELA	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Laela Township Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services for the Laela township area in the Sumbawanga rural District, Rukwa Region. Laela WSSA is classified as Category C water authority. The Water Board and management for running the utility in the Laela town are not yet established. The management of water services is, currently, under the village water committee. There is no activity done by this committee. However, the District Council has assigned one technician to be the manager of the water utility in this town but he is still working in the District Water Engineer's office which is situated in Sumbawanga town about 95km from Laela. The town has a total population of 15,108 people. The average water demand for this town is estimated to be 533m^3/day while the production capacity of water sources is 1,218m^3/day. The water produced serves other villages upstream of the Laela town and the amount of water that reaches Laela is approximately 194m^3/day. The utility draws water from two streams (Kuchena and Mpona) that supply water to the Laela town. The maximum water production from these streams is estimated at 1,218m^3/day. This amount is attained during the rainy season. During the dry season, one stream (Kachena stream) dries up and the other stream (Mpona stream) yield drops to 50% of its capacity. Water from these sources is transmitted by gravity to the Laela town through uPVC 75 – 150mm diameter pipes of about 23km. The source installed production capacity is 1,123m3/day. The system has three storage tanks with total storage capacity of 315m^3. The distribution network consists of uPVC and PE pipes of total length of 7.2 kilometres. The water supply in this town is very small and water is available at an average of three (3) hours a day .The utility has neither water treatment facilities nor water quality monitoring programme. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Sumbawanga District Council. Laela WSSA has 1 employee who is still working at the District Water Engineer's office.
General Data About Water Utility	Total water connections : 144 Total active connections : 11 Total water kiosk/standpipe : 28 Metering ratio : NIL NRW : NIL Total staff : 1 Staff/1000 connections : NIL
Tariff Structure	**Water is provided for free**
Challenges	1. Establishment of water board and management to take over the operational activities. 2. Inadequate water sources to meet the estimated water demand. 3. Lack of water treatment facilities. 4. Lack of capital funds for expansion of water supply services and alternative water sources. 5. Lack of staff.

MAGANZO	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Maganzo Urban Water Supply & Sewerage Authority (Maganzo-WSSA) was declared a fully autonomous public water utility in 2004, and is responsible for overall operation and management of water supply and sanitation services within the Maganzo township, Kishapu District, Shinyanga Region. Maganzo-WSSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 10,972 people and there are 4,183 households. Currently the water authority board has not yet been established and the district regards Maganzo as a village and not a declared township area. People in the service area are getting water services through 5 shallow wells the capacity of which is yet to be established, as well as from the Songwa dam, which dries during the dry season. Formerly, there was a small scheme which used to serve the Maganzo township, it consists of a borehole and a raised steel storage tank but now the scheme has been abandoned owing to water being more saline. Also, there was a pipeline which was serving Maganzo from the Mwadui Diamond Mines but, currently, the pipeline has been vandalized.
General Data About Water Utility	No operational data has been established to date.
Tariff Structure	**NOTE:** Vendors sell water drawn from the Mwadui Diamond Mine at *Tshs/20 litres bucket* 250-300, while that from the Songwa dam is being sold at *Tshs/20 litres bucket* 150-200.
Challenges	1. No operational water Board and Authority is in place. 2. With the exception of storage tanks and shallow wells, no water supply infrastructure is in place.

MAGUGU **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Magugu Urban Water Supply and Sanitation Authority (MAWASA) was declared a fully autonomous public water utility in 2007, and is responsible for the overall operation and management of water supply and sanitation services to the Magugu township located in the Babati District, Manyara Region. MAWASA is classified as Category C water authority. Its area of responsibility has a total population of 29,585 people of which 6,500 persons are served. The utility draws water from the Dalakuta intake at the Kou River formed by the springs originating from the Haisadi hills in the Mbulu District. Pretreatment of water is done through the sedimentation tank and gravitates to the Magugu town. The installed production capacity is 864m^3/day. The installed production capacity is not sufficient to meet the estimated demand of the township of 1,377m^3/day. The total length of the pipe network is 30 km and water is supplied at an average of 3 hrs. There are 2 storage tanks which have combined storage volume of 100m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Babati District Town Council. MAWASA has 7 employees and a deficiency of 2 employees.

General Data About Water Utility

Total water connections	: 243
Total active connections	: 241
Total water kiosk/standpipe	: 17
Metering ratio	: 2.8%
NRW	: 76%
Total staff	: 6
Staff/1000 connections	: 31
Annual O&M costs	: Tzs 18,000,000
Annual water collections (Arrears included)	: Tzs 17,884,000
Annual water billings	: Tzs 23,969,000

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Consumption charges (**TZS/M^3**)	5,000	12,500 - 21,000	7,000 -23,000

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Old and worn out existing water infrastructures.
2. Fund for construction of modern treatment plants and new transmission line.
3. Lack of office building and transport.
4. Lack of transport facilities for operation and maintenance activities.
5. Lack of funds for expanding the distribution mains.

MAKAMBAKO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Makambako Urban Water Supply and Sanitation Authority (MAKUWASA), was declared a fully autonomous public water utility in 2002, and is responsible for the overall operation and management of water supply and sanitation services for the Makambako Small Township area situated in the Njombe District, Iringa Region. MAKUWASA is classified as Category C water authority and started its operation in January, 2004. Its area of responsibility has a total population of 64,256 people of which 40,738 persons are served with water. The utility draws water from the Fukulwa river, which is gravity scheme, located 20 km from the town centre as well as from the Mizani and Bwawani boreholes. The average water production from the sources during the reporting period was 3,067m^3/day.

The source installed production capacity is 3,180m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 5,954m^3/day. The utility has no water treatment facilities; however, water quality monitoring is done though not regularly. The total length of the distribution network is 61 km and water is supplied at an average of 9.5 hrs. The network has 5 storage tanks with different storage capacities which amount to 795m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Makambako Township Authority. Makambako WSSA has 22 employees with a deficiency of 8 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 3,249
Total active connections	: 3,127
Total water kiosk/standpipe	: 59
Metering ratio	: 82%
NRW	: 37%
Total staff	: 22
Staff/1000 connections	: 8
Annual O&M costs	: TZS 163,494,998
Annual water collections (Arrears included)	: TZS 214,434,250
Annual water billings	: TZS 201,918,972

Tariff Structure

Category of customer	Band	Domestic	Institutions	Commercial	Industrial
Minimum tariff (**TZS/month**)	1-10m^3	3,000	NA	NA	NA
	1-20m^3	NA	NA	8,000	NA
	1-25m^3	15,000	10,000	NA	15,000
Consumption rate (**TZS/m^3**)	>10m^3	350	NA	NA	NA
	>20m^3	NA	NA	450	NA
	>25m^3	NA	450	NA	650
Flat rate (**TZS/month**)	NA	3,500	12,000	10,000	NA

Kiosk tariff is at TZS 10 per 20 litres jerrycan.

Challenges

1. Development of additional water sources to meet the current and future water demand.
2. Lack of water treatment facilities.
3. Lack of sufficient and qualified staff.
4. Insufficient storage facilities.
5. Limited funds for investing in new water sources and extension of distribution system.

MBALIZI **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mbalizi Urban Water Supply and Sanitation Authority (MBUWASA), was declared a fully autonomous public water utility in 2005,and is responsible for the overall operation and management of water supply and sanitation services within the Mbalizi Township area in the Mbeya Rural District, Mbeya Region. MBUWASA is classified as Category C water authority and started its operation in 2007. Its area of responsibility has a total population of 52,315 people of which 11,614 persons are served with water. The utility draws water from two gravity streams, namely the Mfwizimo stream of capacity of 220m^3/day, and Lunji from the Nsalala stream of capacity 220m^3/day, both originating from the Mbeya Peak Mountain. The utility also purchase water in bulk from the Mbeya WSSA through two gravity stream sources of Iyela (60m^3/day) and Nzovwe (800m^3/day) .The average water production from the sources during the reporting period was 1,137m^3/day (including supply from Mbeya WSSA).

The source installed production capacity is 890m^3/day. The present production capacity is not sufficient to meet the estimated water demand of 4,490m^3/day. Water supplied is disinfected through chlorine dosing and water quality testing is being carried out. The total length of the entire pipe network is 90 km and water is supplied at an average of 8 hrs. The distribution network has 5 storage tanks of different sizes and combined storage volume of 352.5m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Mbalizi Township Authority. Mbalizi WSSA has employees with a deficiency of 7 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 2,656
Total water kiosk/standpipe	: 35
Metering ratio	: 17%
NRW	: 39.4%
Total staff	: 24
Staff/1000 connections	: 9
Annual O&M costs	: TZS 178,163,579
Annual water collections (Arrears included)	: TZS 157,733,644
Annual water billings	: TZS 331,312,705

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Kiosk
Metered (**TZS/M^3**)	300 – 395	400	450	NA
Flat rate (**TZS/Month**)	5000 - 7500	10,000	17,500	NA

Kiosk tariff is TZS 20 per 20 litres jerrycan.

Challenges

1. Inadequate water sources to meet the estimated water demand.
2. Small distribution pipe network compared with the area need to be covered.
3. Management of billing and revenue collection including recovery of arrears.
4. High NRW.
5. Low metering ratio.
6. Lack of its own office building and transport.
7. Lack of sufficient and qualified staff.

MIKUMI (MIKUMI WATER SUPPLY CO. LTD) **PROFILE AS PER 2007/08 DATA**

General Description About the Utility

Mikumi Urban Water Supply and Sanitation Authority Water Board (Mikumi WSSA) is yet to be commissioned and therefore water supply for the Mikumi township is still managed by the Mikumi Water Company. The company was declared a water supply company 31/07/1997 under the Companies Ordinance (Cap. 212). Mikumi Water Supply Co. Ltd has 10 members of the Board of Directors. The company is responsible for the overall operation and management of water supply and sanitation services within the urban area of the Mikumi township which is small town in the Kilosa District, Morogoro Region. Mikumi town water supply mainly depends on the Madibila river intake and one borehole located at the Tambuka reli area. The Madibila intake is located in the Madibila Hills about 13km from the town centre, where water gravitates into storage tanks located at 7km from the intake. The borehole, on the other hand, is not yet installed with a pump and, therefore, not functional. The Madibila gravity scheme was constructed in 1975. The intake consists of 7km gravity main pipes. The company was granted provisional water right under the water utilization (Control and Regulation) Act, 1974, for abstracting 902,000 litres per day for domestic use. The daily water production from the intake is estimated to be 720m^3/day, while the estimated current demand is 834m^3/day. This estimated production is 86% of the daily water requirement. The average daily supply is around eighteen (18) hours a day. The utility has no water treatment facility and no water quality monitoring plan is in place. The total length of the distribution system is 18.3km, and water is supplied at an average of 18 hrs/day. The water supply authority has no sewerage network. The sanitation facilities in this town are mainly pit latrines with few septic tanks in use are under the monitoring of the District Council

General Data About Water Utility

Total water connections	: 320
Total active connections	: 320
Total water kiosk/standpipe	: 18
Metering ratio	: 0%
NRW	: 35%
Total staff	: 5
Staffs/1000 connection	: 15
Annual O&M costs	: Tzs 3,239,400
Annual water collections (Arrears included)	: Tzs 3,024,000
Annual water billings	: Tzs 5,171,040

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Metered customers (**TShs/m3**)	NA	NA	NA
Flat rate (**TShs/month**)	3,000	2,000	3,000

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Delay in establishment of the Urban Water Supply Authority which has hampered commercial operations. 2. Failure to access the funds is attributed by the absence of town water board (authority). 3. Few connections and Low metering. 4. Insufficient water source capacity to cater for the town's water demand coverage. 5. Treatment facilities

MLOWO	PROFILE AS PER 2007/08 DATA
General Description About the Utility	Mlowo Urban Water Supply and Sewerage Authority was established on 17th June, 2005, with the responsibility of providing water supply and sanitation services within the Mlowo township located in the Mbozi District, Mbeya Region. Mlowo WSSA has a Board of Directors which started its operation on 18th January, 2007. The utility is not yet active, hence water supply operations had not commenced in the town owing to lack of reliable water sources. Its area of operation has a total population of 14,980 and the population with water services is 4,500 people. Water sources for the Mlowo town are mainly three (3) protected springs located at Lutumbi. The springs were developed (protected) in 2007 by using funds set aside by the District Council. The total yield of the springs is approximately 238m^3/day. People in the Mlowo Town fetch water directly from the springs. The District council has also financed drilling of a borehole at the Mlowo Primary School. The borehole has a yield of 2.84m3/hr. The town has a distribution network with a total length of approximately 2.432 km. The Mlowo town has no sewerage network. The sanitation facilities in this town are mainly pit latrines and septic tanks. There is one (1) storage tank for the Mlowo Town Water Supply called Majengo Tank with total storage capacity of 90m^3. The tank is on the ground and was designed to receive water from the Mlowo river and serves the Mlowo town through a distribution network which had five (5) domestic points. The tank is not functioning because of the collapse of the scheme which was utilizing the Mlowo River.
General Data About Water Utility	Total water connections : 0 Total water kiosk/standpipe : 5 Metering ratio : 0% Total staff : 1
Tariff Structure	The tariff has not been set as there are no water services.
Challenges	1. Lack of reliable water sources. 2. Lack of management to run the daily activities of the utility.. 3. Lack of water treatment facilities. 4. Lack of sufficient and qualified staff.

MOMBO **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Mombo Urban Water Supply and Sanitation Authority (MOUWSA) was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services within the Mombo Township area located in the Korogwe District, Tanga Region. MOUWASA is classified as Category C water authority. Its area of responsibility has a total population of 17,876 people of which 8,382 persons are currently served. The utility draws water from two intake river sources, the *Mbokoi* and *Soni* which are connected to the common gravity main supplying water direct to customers. The combined installed production capacity is 620m^3/day .The present production capacity is low compared with the estimated water demand of 1,200m^3/day. The utility has no water treatment facilities as well as no water quality monitoring in place. The total length of the distribution system is 12.319 km and water is supplied through rationing at an average of 16 hrs. The system has 2 storage tanks not in use owing to location problems, with combined capacity of 135m^3. The township has no sewerage system; presently, onsite sanitary facilities are in use under the Mombo Township Authority. MOUWSA has 7 employees with a deficiency of 9 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 538
Total active connections	: 372
Total water kiosk/standpipe	: 21
Metering ratio	: 63%
NRW	: 54%
Total staff	: 9
Staff/1000 connections	: 16.7
Annual O&M costs	: Tzs 38,277,288
Annual water collections (Arrears included)	: Tzs 30,247,530
Annual water billings	: Tzs 32,004,924

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	300	300	300	300
Flat rate charge (**TZS/month**)	2,000	15,000	5000	NA

Note: The charges at water kiosks are TZS 7 per 20 litres jerrycan.

Challenges

1. Low production from the available water sources.
2. Low network coverage.
3. Lack of water treatment facilities.
4. Insufficient storage tanks.
5. Lack of authority office building and transport.
6. Lack of sufficient and qualified staff.

TUNDUMA **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Tunduma Township Water Supply and Sanitation Authority was declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply and sanitation services for the Tunduma Small Township area in the Mbozi District, Mbeya Region. Tunduma WSSA is classified as Category C water authority and started its operation in 2005. Its area of responsibility has a total population of 57,700 people of which 19,839 persons are served with water. The utility draws water from four boreholes of MB. No. 237/98 with capacity of 432m^3/day, MB. No. 264/08 of capacity 469m^3/day, MB.No. 265/09 of capacity 246m^3/day and MB. No. 158/10 of capacity 237.6m^3/day. The average water production from the sources during the reporting period was 407$m^{3/}$day

The source installed production capacity is 1,596m^3/day .The present production capacity is not sufficient to meet the estimated water demand of 3,549m^3/day. The utility has neither water treatment facilities nor water quality monitoring programme. The total length of the entire pipe network is 39.374 km and water is supplied at an average of 3 hrs. The distribution network has 3 storage tanks of different sizes and combined storage volume of 275m^3. The town has no sewerage system; onsite sanitary facilities are in use under supervision of the Tunduma Township Authority. Tunduma WSSA has 14 employees.

General Data About Water Utility

Total water connections	: 463
Total active connections	: 412
Total water kiosk/standpipe	: 29
Metering ratio	: 47%
NRW	: 53%
Total staff	: 14
Staff/1000 connections	: 30
Annual O&M costs	: TZS 254,480,060
Annual water collections (Arrears included)	: TZS 23,538,269
Annual water billings	: TZS 26,302,095

Tariff Structure

Category of customer	Domestic	Institutional	Commercial	Kiosk
Metered (**TZS/m^3**)	375	450	600	1,000
Flat rate (**TZS/month**)	4,700	6,000 – 8,000	10,000 – 16,000	NA

Challenges

1. Inadequate water sources to meet the estimated water demand.
2. Low pipe network coverage.
3. Lack of capital funds for expansion of water supply services.
4. Lack of sufficient and qualified staff.
5. Lack of office building and transport facilities.
6. Low metering ratio.
7. Aged rising and distribution main which results into frequent bursts and leakages.

CHALINZE **PROFILE AS PER 2007/08 DATA**

General Description About the Utility

Chalinze Water Supply is one of the National Water Project that was initiated in the early 1980's with a planned aim of supplying water to 61 villages. The utility draws water from the Wami River with installed production capacity of 7,200m^3/day. The installed production capacity is sufficient to meet the estimated demand for the project area of 2,915m^3/day. The total length of the distribution system is 126 km and water is supplied at an average of 24 hrs. There are 10 storage tanks which have combined storage volume of 5,900m^3. Chalinze Water supply has a total of 75 staff.

General Data About Water Utility

Total water connections	: 1,362
Total water kiosk/standpipe	: 369
Metering ratio	: 100%
Total staff	: 75
Staff/1000 connections	: 55
Annual O&M costs	: Tzs 820,059,971.90
Annual water collections (Arrears included)	: Tzs 468,348,838
Annual water billings	: Tzs 584,962,259

Tariff Structure

Category	Domestic	Institutional	Commercial	Industrial	Kiosk
Consumption Charge (**TZS/m^3**)	800	800	1000	1,000	850

Challenges

4. Increased leakage.
5. Some customers are not paying their bills in time.
6. Illegal connections.
7. Lack of billing software.
8. Lack of regular training to the staff.

HANDENI TRUNK MAIN (HTM) NATIONAL PROJECT **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Handeni Trunk Main (HTM) Water Supply Authority is an autonomous public water utility which became operational in 2004, and is responsible for providing water supply services to the Handeni District. HTM is located in the Korogwe and Handeni Districts, Tanga region, and serves 6 small towns including the Handeni Urban, 56 registered villages and 3 camps. HTM water supply authority is classified as Category C. Its area of responsibility has a total population of 213,754 people of which 184,431 people are receiving service from the authority. The project comprised gravity and pumping systems with two intakes both drawing water from the Pangani River. The installed production capacity is 9,160m^3/day which is sufficient to meet the estimated water demand of 7000m^3/day. Owing to high NRW of 83% and low production at an average of 4,457m^3/day, the supply cannot meet the demand. The total length of the pipe network is 456km and water is supplied at an average of 6 hrs. Water is being treated through the conventional treatment plant before being distributed to the consumers. The distribution system has 56 storage tanks with total capacity of 5,269.5m^3.HTM water supply authority has 114 employees.

General Data About Water Utility

Total water connections	: 1,333
Total active connections	: 1,023
Total water kiosk/standpipe	: 186
Metering ratio	: 100%
NRW	: 83%
Total staff	: 114
Staff/1000 connections	: 85
Annual O&M costs	: Tzs 644,175,540
Annual water collections (Arrears included)	: Tzs 188,391,382
Annual water billings	: Tzs 194,712,589

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	750	800	850	1000
Service Charges (**TZS/month)**	1000	1000	1000	1000

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Reduction of NRW to increase water supply.
2. Major rehabilitation of the existing old infrastructure.
3. Increase customer base.

KASHWASA NATIONAL PROJECT **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Kahama-Shinyanga Water Supply & Sewerage Authority (KASHWASA) was declared a fully autonomous public water utility in 2007, and is responsible for supplying bulk water to other water entities located in the urban and rural areas around the Lake Zone. KASHWASA commenced its operation on February, 2009, as a Category C Authority taking responsibility for all operational costs except electricity, chemicals and remuneration for the permanent staff, which has to be borne by the Government. KASHWASA supplies bulk water to water entities in the urban towns of Shinyanga and Kahama plus 54 villages scattered within 5km from the transmission main pipeline in the districts of Misungwi, Kwimba, Shinyanga Rural and Kahama. The utility draws water from Lake Victoria at a location called the Smith Sound bay, Misungwi District. It has a present production capacity of 40,000m^3/day which is well above when compared with the estimated water demand of 31,000m^3/day. The current average production is 24,912m^3/day. The total length of the pipeline system is 203km. Water is supplied at an average of 23 hrs, caused by several breakdowns experienced during the year 2009/2010. The system has 4 storage tanks with a storage capacity of 71,700m^3. KASHWASA has 60 available staff and 29 vacant posts.

General Data About Water Utility

Total water connections	: 43
Total active connections	: 43
Total water kiosk/standpipe	: N/A
Metering ratio	: 100%
NRW	: 11%
Total staff	: 60
Staff/1000 connections	: NA
Annual O&M costs	: Tzs 1,737,255,115.60
Annual water sales collections	: Tzs 768,602,828.00
Annual water billings	: Tzs 1,106,221,418.00

Tariff Structure

Bulk customer	**SHUWASA**	**KUWASA**	**VILLAGES**	**INDUSTRIES**
Bulk rate **(TZS/m3)**	223	223	210	400

NOTE: Mining tariff is 600TZS/m^3

SHUWASA: Shinyanga Urban Water Supply and Sanitation Authority.

KUWASA: Kahama Urban Water Supply and Sanitation Authority.

Challenges

1. Delay in payments of electricity bills by MoW.2. Sabotage on the transmission pipeline.
3. Frequent breakdowns of washout and air valves especially with butterfly valve types.
4. Lack of tools and equipment for carrying out repair and maintenance activities.
5. Inadequate revenue collection to meet operational cost.
6. High burden of operational fixed costs due to low water consumption.
7. Poor condition of roads.
8. Lack of tools and equipment for carrying out repair and maintenance activities

MAKONDE NATIONAL PROJECT **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Makonde Water Supply Authority Urban Water Supply and Sanitation Authority (MAKONDE-WSSA)) was established by Act No. 8 of 1997 on 17th December, 2003. MAKONDE-WSSA started its operations in January, 2004, and is responsible for the overall operation and management of water supply and sanitation services within the three districts of the Newala, Tandahimba and parts of the Mtwara Rural District, Mtwara Region. Its area of operation has a total population of 418,578 people of which 266,328 people are currently served. Makonde Water Supply Scheme is an old scheme that was commissioned in 1957 and draws water from two main types of water sources, which are spring and boreholes. They started by constructing a water source at the Mkunya spring in 1955 - 1957 and later construction of more sources continued by constructing a source at Mahuta in 1972, Nanyamba in 1976, Luchemo in 1977, Mitema-Mtongwele (Kitangari) in 1982, Chiwambo in 1986, Mbwinji in 1986, and Tandahimba in 2000. Currently they have eight sources in which four of the sources are well fields with deep boreholes, and the remaining four are spring sources. The combined production capacity is approximately 13,603m3/day, if all the pumps were operational. This capacity is not fully utilized owing to the dilapidated infrastructure and unreliable power supply. The current production capacity of 3,542m^3/day is very low compared with the reported estimated water demand of 11,571m^3/day. The utility has no water treatment facilities and also the water quality monitoring plan is not in place. The total length of the transmission and distribution system is 886km and water is supplied through rationing at an average of 8 hrs/day. The system has 169 storage tanks, of which 83 are in Newala, 15 are in Nanyamba and 71 are in Tandahimba. Onsite sanitation is under the monitoring of the District Councils of the respective Districts.

General Data About Water Utility

Total water connections	: 2,089
Total active connections	: 1,982
Total water kiosk/standpipe	: 531
Metering ratio	: 35%
NRW	: 67%
Total staff	: 60
Staff/1000 connections	: 28.7
Annual O&M costs	: TShs. 678,992,465
Annual water collections (Arrears included)	: TShs. 74,434,800
Annual water billings	: TShs. 65,389,800

Tariff Structure

Category of customer	Domestic	Institutional	Commercial
Metered customers (**TShs/month**)	500	500	500
Flat rate (**TShs/month**)	10,000	5,000 – 50,000	4,000 - 10,000

Note: The charges at water kiosks are TSHS. 10 per 20 litres jerrycan.

Challenges

1. Inadequate qualified staff. 2. Rehabilitation and replacement of pumps/plants. 3. Low metering ratio. 4. Lack of reliable transport facilities. 5. Training in billing section. 6. High NRW

MASWA NATIONAL PROJECT **PROFILE AS PER 2009/2010 DATA**

General Description About the Utility

Maswa Urban Water Supply & Sewerage Authority (MAUWSA) was declared a fully autonomous public water utility in 1998, and is responsible for overall operation and management of water supply and sanitation services within the Maswa Urban area, which is the headquarters of the Maswa District, Shinyanga Region. MAUWSA is classified as Category C water authority. Its area of responsibility is estimated to have a total population of 65,726 of which 11,246 persons are currently served. The water sources for MAUWSA are two dams (New Sola and Nyanguganwa) and five boreholes located at the Madeco Farm, Uzunguni, Mwanguhi, Sola and Badabada. All the sources have the total present production capacity of 6,688m^3/day which is insufficient compared with the estimated water demand of 7,000m^3/day, but only an average 5,684 m^3/day was produced in 2009/2010. The total length of the distribution pipeline system is 78km. Water is supplied through rationing at an average of 12 hrs. The system has 2 storage tanks with a storage capacity of about 400m^3. The township has no sewerage system; onsite sanitary facilities are in use under the Maswa District Town Council. MAUWSA has 41 employees, 13 permanent and 28 on contract. Vacant posts are 10.

General Data About Water Utility

Total water connections	: 1,821
Total active connections	: 1,821
Total water kiosk/standpipe	: 32
Metering ratio	: 19%
NRW	: 78%
Total staff	: 41
Staff/1000 connections	: 22.5
Annual O&M costs	: 390,857,606.90
Annual water collections (Arrears included)	: 157,475,845.00
Annual water billings	: 126,593,350.00

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	400	500	600	1,000
Flat rate charge (**TZS/month**)	3,000 – 5,000	10,000	7,000	50,000

NOTE: The charges at water kiosks are TZS 10 per 20 litres jerrycan

Challenges

1. Very high NRW, caused by very low metering ratio.
2. Small storage capacity.
3. High electricity cost as a result of direct pumping.
4. Low metering as most of the customers are not metered.
5. Unrealistic production figures due to lack of bulk meters at production points.

MUGANGO/KIABAKARI NATIONAL PROJECT **PROFILE AS PER 2008/09 DATA**

General Description About the Utility

Mugango/Kiabakari/Butiama Water Authority, declared a fully autonomous public water utility in 2004, and is responsible for the overall operation and management of water supply services within 13 villages in the Mara Region. The Authority is classified as Category C water authority. Its area of responsibility has a total population of 72,040 people of which 43,224 villagers are currently served. The utility draws water from Lake Victoria from the intake located at Mugango. The sources have a total installed production capacity of 8,568m^3/day .The present production of 1,752m^3/day is insufficient compared with the estimated water demand of 8,800m^3/day. The total length of the pipeline system is 103 km and water is supplied through rationing at an average of 12 hrs. The system has 6 storage tanks with a combined capacity of 2,306m^3. Mugango/Kiabakari Water Authority has 16 employees and 10 daily paid staff of different qualifications and professions.

General Data About Water Utility

Total water connections	: 486
Total active connections	: 466
Total water kiosk/standpipe	: 3
Metering ratio	: 30.2%
NRW	: 65.2%
Total staff	: 26
Staffs/1000 connection	: 53.5
Annual O&M costs	: Tzs 48,316,910.00
Annual water collections (Arrears included)	: Tzs 42,164,423.00
Annual water billings	: Tzs 66,766,956.00

Tariff Structure

Category of customer	**Domestic**	**Institutional**	**Commercial**	**Industrial**
Consumption charge (**TZS/m3**)	300	300	450	-
Flat rate charge (**TZS/Month**)	8,000	25,000	15,000	-

Note: The charges at water kiosks are TZS 20 per 20 litres jerrycan.

Challenges

1. Insufficient water production as compared to demand.
2. Water rationing.
3. Low metering.
4. Inefficient staff to connection ratio.
5. Low revenue collection.

WANGINGOMBE NATIONAL WATER SUPPLY PROJECT **PROFILE AS PER 2009/10 DATA**

General Description About the Utility

Wangingombe National Water Supply Project is one of the National Water Supply Schemes constructed in 1978 located in the Njombe district, Iringa region, covering an area of 1000 km^2. The scheme supplied water to 60 villages located in the three divisions of Mdandu, Wanging'ombe and Makambako.The project is classified as Category C water authority. The project area has a total population of 110,000 people of which 109,650 are served with water. The utility draws water from two gravity schemes of the Mbukwa river intakes and Mtitafu river intakes, with capacities of 6,700m^3/day and 600m^3/day respectively. Water from these sources is transmitted through DN 500mm to DN100mm pipes, of total length of 106km, to 59 different tanks of capacities ranging from 25 to 136m^3, of total storage capacity of 4,277m^3.

The estimated average water production in 2009/10 was 7300 m^3/day .Water production capacities are less than the estimated water demand in the project area, of 7,900m^3/day. No treatment is done despite that water produced contains high turbidity especially during the rainy season. Water is supplied at an average of 24 hrs per day. The project area has no sewerage system; onsite sanitary facilities are in use. Wangingombe National Water Supply Project has 46 employees of different qualifications and professions.

General Data About Water Utility

Total water connections	: 2,399
Total active connections	: 2,100
Total water kiosk/standpipe	: 750
Metering ratio	: 35%
NRW	: 55%
Total staff	: 44
Staff/1000 connections	: 20
Annual O&M costs	: TZS 118,775,834
Annual water collections (Arrears included)	: TZS 92,182,600
Annual water billings	: TZS 80,946,000

Tariff Structure

Category of	Band	Domestic	Institutional	Commercial	Kiosks
Consumption rate TZS/m^3	0 - 10	200	NA	NA	NA
	➢ 10	250	NA	NA	NA
	0-50	NA	NA	250	NA
	>50	NA	NA	280	NA
	0-500	NA	200	NA	NA
	>500	NA	250	NA	NA
Flat rate TZS/m^3/month	Minimum	3,000	15,000	15,000	5,000

Challenges

1. Human encroachment at the water source catchment areas.
2. High water losses due to aged pipe network.
3. Unwillingness of people to pay for the services.
4. Low billing as well as collection efficiency.
5. Capacity building of the existing support staff.

MANGAKA	PROFILE AS PER 2009/10 DATA
General Description About the Utility	Mangaka is a newly established Authority gazette in 2008 (GN. 163) and became operational in 2009 with inadequate staff. Mangaka Township has reported population of about 10,373. The Authority has eight wells fitted with hand pumps that extract water from the wells. Some of the wells usually dry during the dry season. There is no pipeline network around the township. The available wells are able to serve 2,000 customers which is 19% of the total population. The Authority is not capable of serving its population as it has eight hand pumps at the public kiosks some of which, as explained above, dry out during the dry season. The Authority sales water at kiosks at a cost of 20/= per bucket of 20 lts with an average annual collection of 1.4 million. The Authority has one employee only, the Manager who oversees the operations at kiosks and all other issued related to the Authority. Currently, there is no ongoing project.
General Data About Water Utility	Total water connections : nil Total active connections : nil Total water kiosk/standpipe : 8 Metering ratio : 0% NRW : No data Total staff : 1 Staff/1000 connections : No data Annual O&M costs : TShs. nm Annual water collections (Arrears included) : TShs. No data Annual water billings : TShs. No data
Tariff Structure	**Category of customer** / **Domestic** / **Institutional** / **Commercial** Metered customers (**TShs/month**): none / none / none Flat rate (**TShs/month**): none / none / none **Note**: The charges at water kiosks are TShs. 20 per 20 litres jerrycan.
Challenges	1. Inadequate qualified staff. 2. Rehabilitation and replacement of pumps/plants. 3. Lack of reliable transport facilities. 4. Lack of office building. 5. Need of exploring new water sources

TABLE A2 : SUMMARY OF KEY PERFOMANCE DATA 2009/10

No.	Utility name	Installed Capacity (m3/day)	Water Production (m3/day)	Total customers	Population	Population Served	Water Demand m3/day	Total staff	Proportion of vacant post%	Revenue Collection (TZS)	Expenditure (TZS)
District Urban Water Supply And Sewerage Authority											
1	Bariadi	744	317	379	53,232	10,870	2,874	17	10	25,559,607	55,969,898
2	Biharamulo	515	364.1	658	18,000	11,000	1,242.70	26	28	58,694,800	76,022,829
3	Bunda	1,260	1,049.90	1,214	83,769	22,403	5,000	22	12	71,800,412	202,163,103
4	Chunya	1,034	531	675	18,547	9,055	1,028	13	28	54,731,610	72,656,584
5	Geita	522.7	196.6	172	80,813	36,152	5,599.70	11	0	11,193,385	34,155,943
6	Handeni	1,220	145	405	44,407	15,920	2,186	9	47	29,207,830	63,104,000
7	Ifakara	1,392	1,122	593	66,390	28,164	1,600	11	45%	30,641,400	25,032,000
8	Igunga	4,149	704	725	19,000	8,740	1,500	11	0	50,109,446	52,344,220
9	Itumba-Isongole	1,134	1,146	970	13,984	9,089	980	14	30	20,173,790	34,940,430
10	Kahama	6,600	5,589	7,485	128,312	85,140	9,000	42	0	1,532,943,216	978,120,079
11	Kasulu	4,534.40	4,472	2,382	44,545	32,785	5,054	17	82.5	59,249,672	82,595,580
12	Katesh/Hanang'	3,217	2008	1,245	14,931	10,176	1,749	10	0	54,693,550	57,693,550
13	Kibaya	426	190	317	15,656	10,960	1400	16	43	10,934,616	45,554,497
14	Kibondo	1,200	167	660	27,801	15,716	982	37	No Data	33,218,560	33,218,560
15	Kilwa Masoko	3,361	2,066	1,007	17,534	10,150	2,466	25	17%	76,432,089	67,000,990
16	Kiomboi	1,202	276	400	12,480	9,360	1,510	14	0	37,183,533	76,633,042
17	Kisarawe	516	1,896	215	10,592	7,054	3,600	13	No Data	9,544,100	33,391,776
18	Kondoa	3,284	3,273	2,035	27,759	24,255	4,500	27	13%	147,396,680	129,412,138
19	Kongwa	1,152	1,072	320	16,244	7,550	1,410	16	No Data	77,754,430	77,108,932
20	Korogwe	2,700	1945	2315	62,028	37,152	4,243	18	62	182,302,260	232,395,254
21	Ngudu	840	253	413	18,715	8,362	1,292	10	40	30,660,220	90,123,494
22	Kyela	4,330	4,090	2,201	44,905	41,316	3,143	21	19	74,920,800	47,812,421
23	Liwale	1,160	1,160	1,086	28,063	20,828	1,964	18	29%	63,992,282	239,817,499
24	Ludewa	891	466	374	7,382	3,565	663	7	22	7,417,645	6,059,000
25	Lushoto	2000	1094	1005	21,418	15,050	2,235	7	6	60,359,470	78,122,704
26	Mafinga	2,914	1,838	1,752	34,414	18,220	3,441	17	11	113,534,492	198,698,896
27	Magu	1,065.20	1,006	1,416	37,770	10,089	7,085	20	0	21,407,000	193,040,772
28	Makete	1,734	1,734	860	18,254	10,952	4,438	6	33	33,644,315	46,954,000

No.	Utility name	Installed Capacity (m3/day)	Water Production (m3/day)	Total customers	Population	Population Served	Water Demand m3/day	Total staff	Proportion of vacant post%	Revenue Collection (TZS)	Expenditure (TZS)
29	Masasi	1,824	1,030	853	110,647	23,250	7,745	19	70%	87,592,340	56,334,320
30	Mbinga	2,049	1,437	1,400	33,749	18,140	3,180	13	19%	90,333,770	86,000,228
31	Mbulu	1,264	895	986	23,091	23,091	1921	9	-	89,534,090	105,972,567
32	Misungwi	419.2	181	410	30,000	11,475	2,071	9	36	30,615,131	69,867,521
33	Monduli	4258	1790	489	7578	5100	1000	10	37.5	43,205,780	85,163,128
34	Mpanda	4,100	2,930	2,333	63,000	40,844	4,730	25	No *data*	130,651,168	331,357,743
35	Mpwapwa	1,871	1,271	1,084	50,941	24,000	7,500	39	20%	102,447,053	92,302,047
36	Muheza	1,920	1,425	1,968	27,895	13,260	4,831	8	-	57,617,525	75,942,781
37	Muleba	736	208	366	17,402	8,490	1,353	9	31	33,862,370	108,497,603
38	Mwanga	1080	923	1358	14,500	8000	2,200	21	0	51,281,735	209,842,361
39	Nachingwea	3,096	2,364	812	23,092	9,699	5,640	14	22%	23,691,195	101,117,343
40	Namtumbo	1,211	600	556	30,000	16,800	1,200	7	40%	21,503,600	37,445,450
41	Nansio-Ukerewe	4,800	641	663	61,659	10,065	2,500	3	57%	34,511,314	35,629,292
42	Ngara	2,184	1,059	1,580	21,761	19,346	1,519	18	No Data	98,347,820	347,153,230
43	Njombe	3,467	3,317	2,865	50,100	34,619	4,800	27	0	251,518,149	177,821,276
44	Nzega	1,205	1,368	1,386	32,232	19436	2,100	9	3	143,250,025	233,547,462
45	Pangani	1,404	1350	1,080	16,250	10,550	2,250	15	16	63,867,690	171,574,944
46	Same	2,544	1193	1188	25,000	17,000	4,500	18	31	138,778,712	162,746,018
47	Songe	265	265	84	14,000	9,225	494	1	59	33,600,000	30,000,000
48	Tarime	8,502	1,208	704	53,067	11,750	4,142	15	No Data	74,239,000	50,256,350
49	Tukuyu	3,586	5,004	3,522	31,090	18,110	3,561	19	14	140,981,891	196,300,312
50	Urambo	436.8	183	124	35,936	10,062	1,261	11	0	14,476,845	15,282,800
51	Ushirombo	71	25	34	43,570	7,200	3,253	6	No data	8,995,576	20,876,969
52	Utete	613	405	430	9,353	7,001	611	11	35	6,459,500	50,596,680
53	Vwawa	1,862	1,547	948	28,410	19,830	2,874	10	33	41,378,368	54,248,344
54	Chamwino	1,440	1,080	872	29,340	19,210	1,636	20	37%	No Data	No Data
55	Dakawa - Mvomero	480	40	124	40,716	10,569	621	10	41%	3,020,000	1,800,000
56	Kilindoni	522	217	217	14,401	5508	804	9	40	5,017,500	26,085,831
57	Kilolo	440	414	97	23,087	14,314	880	8	0	12,399,940	8,082,500
58	Kilosa	1,752	1,252	1,281	26,658	14,928	2,364	21	43%	56,466,450	113,281,594
59	Mahenge	420	409	727	16,500	9,000	2,112	10	38%	12,651,650	10,924,414

No.	Utility name	Installed Capacity (m3/day)	Water Production (m3/day)	Total customers	Population	Population Served	Water Demand m3/day	Total staff	Proportion of vacant post%	Revenue Collection (TZS)	Expenditure (TZS)
60	Manyoni	4,000	510	460	20,068	12,000	1,000	13	0	22,641,265	37,472,740
61	Mkuranga	312	100	44	10,778	596	605	8	No Data	2,181,100	No Data
62	Mugumu	38,620	NA	705	23,000	23,000	1,500	21	No Data	No Data	No Data
63	Ruangwa	324	263	382	12,000	3,160	1,026	11	53%	5,040,000	32,650,560
64	Rujewa	2,500	2,500	1,392	34,337	19,800	4,216	21	0	44,597,120	39,874,593
65	Sengerema	3,240	2,959	2,200	60,624	78.8	4,833	28	12.5	101,492,243	222,210,230
66	Sikonge	340	180	259	12,640	3,480	526	15	0	35,530,407	60,248,597
67	Tunduru	1,600	1,188	836	38,384	23,031	2,571	7	59%	29,924,393	57,356,069
NATIONAL WATER PROJECTS											
68	Chalinze	7,200	13,185	1,362	NA	NA	2,915	75	4	468,348,838	820,059,971..90
69	HTM	9,160	4,457	1,333	213,754	184,431	7000	114	0	188,391,382	644,175,405
70	KASHWASA	80,000	24,912	56	500,000	230,000	31,000	60	29	768,415,712	1,737,255,116
71	Makonde	13,603	3,542	2,089	418,578	19,250	11,571	60	48%	No Data	No Data
72	Mugango-Kyabakari	8,568	4,585	486	72,040	43,224	8,800	26	66	42,164,423	48,316,910
73	Wanging'ombe	7,300	7,300	2,399	110,000	109,650	7,949	48	0	92,182,600	118,775,834
74	Maswa	6,688	5,684	1,821	65,726	11,246	7,000	41	10	157,475,845	390,857,607
Small Town Water Supply Authorities											
75	Kasumulu	1,203	342	649	11,217	6,505	967	8	20	18,932,550	18,711,770
76	Magugu	864	648	243	29,585	6,500	1377	6	22	17,884,000	18,000,000
77	Makambako	3,180	3,067	3,249	64,256	40,378	5,954	22	27	214,434,250	163,494,998
78	Mbalizi	1,831	1,137	2,656	43,166	29,864	4,428	24	20	157,733,644	178,163,579
79	Mombo	576	483	511	17,382	7,702	1,184	7	56	25,626,030	125,227,559
80	Tunduma - Mbozi	1,596	407	463	50,700	19,839	3,549	26	No Data	23,538,269	254,480,060
81	Gairo	740	520	174	23,381	12,082	2,495	13	nm	28,190,000	25,479,590
82	Gallapo	1250	687.5	945	19,013	9,507	475	1	NA	19,200,000	24,000,000
83	Ilula	820.8	820.8	326	39,994	16,398	2,799.60	13	No Data	13,131,380	13,131,380
84	Isaka	480	51	86	21,596	No Data	1,137	1	No Data	22,295,700	15,543,840
	Total	**310,915**	**155,730**	**88,946**	**3,904,189**	**1,831,666**	**284,716**	**1,568**	**1,082**	**7,381,348,548**	**10,621,619,735**

Table A4: WATER UTILITIES BOARD STATUS AND REGULATORY OBLIGATIONS

S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission
District Urban Water Supply Authority					
1	Bariadi	Yes	Yes	Yes	Yes
2	Biharamulo	Yes	Yes	Yes	Yes
3	Bunda	Yes	Yes	Yes	Yes
4	Chunya	No	Yes	Yes	Yes
5	Geita	No	Yes	Yes	Yes
6	Handeni	Yes	Yes	Yes	Yes
7	Ifakara	Yes	Yes	Yes	Yes
8	Igunga	Yes	Yes	Yes	Yes
9	Itumba-Isongole	Yes	Yes	Yes	Yes
45	Njombe	Yes	Yes	Yes	Yes
46	Nzega	Yes	Yes	Yes	Yes
47	Pangani	Yes	Yes	Yes	Yes
48	Same	Yes	Yes	Yes	Yes
49	Songe	No	Yes	Yes	Yes
50	Tarime	Yes	Yes	Yes	Yes
51	Tukuyu	Yes	Yes	Yes	Yes
52	Urambo	Yes	Yes	Yes	Yes
53	Ushirombo	Yes	Yes	Yes	Yes
Small Town Water Supply Authorities					
82	Kasumulu	Yes	Yes	Yes	Yes
83	Magugu				
84	Makambako	Yes	Yes	Yes	Yes
85	Mbalizi	Yes	Yes	Yes	Yes
86	Mombo	Yes	Yes	Yes	Yes
87	Tunduma	Yes	Yes	Yes	Yes
88	Bashnet	No	No	No	No
89	Bonga	No	No	No	No

S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission
10	Kahama	Yes	Yes	Yes	Yes
11	Karagwe	Yes	Yes	Yes	No
12	Kasulu	Yes	Yes	Yes	Yes
13	Katesh/Hanang'	Yes	Yes	Yes	Yes
14	Kibaya	Yes	Yes	Yes	Yes
15	Kibondo	Yes	Yes	Yes	Yes
16	Kilwa Masoko	Yes	Yes	Yes	Yes
17	Kiomboi	Yes	Yes	Yes	Yes
18	Kisarawe	No	Yes	Yes	Yes
19	Kondoa	Yes	Yes	Yes	Yes
20	Kongwa	No	Yes	No	Yes
21	Korogwe	Yes	Yes	Yes	Yes

S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission 2020/19
54	Utete	Yes	Yes	Yes	Yes
55	Vwawa	Yes	Yes	Yes	Yes
56	Chamwino	No	Yes	No	No
57	Dakawa - Mvomero	No	No	No	Yes
58	Isikizya (Uyui)	No	No	No	No
59	Kilindoni	No	Yes	Yes	Yes
60	Kilolo	No	Yes	Yes	Yes
61	Kilosa	Yes	Yes	Yes	Yes
62	Kishapu	No	Yes	No	No
63	Loliondo	No	No	No	No
64	Mahenge	No	Yes	Yes	Yes
65	Manyoni	No	Yes	No	Yes

S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission 2020/19
90	Chala	No	No	No	No
91	Dareda	No	No	No	No
92	Didia	No	No	No	No
93	Gairo	No	No	Yes	No
94	Galapo	No	No	No	No
95	Ilula	No	Yes	Yes	No
96	Isaka	No	Yes	No	No
97	Iselamagazi	No	No	No	No
98	Jomu (Tinde)	No	No	No	No
99	Laela	No	No	No	No
100	Maganzo	No	No	No	No
101	Mikumi	No	No	No	No

S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission
22	Ngudu	Yes	Yes	Yes	Yes
23	Kyela	No	Yes	Yes	Yes
24	Liwale	Yes	Yes	Yes	Yes
25	Ludewa	No	Yes	Yes	Yes
26	Lushoto	Yes	Yes	Yes	Yes
27	Mafinga	Yes	Yes	Yes	Yes
28	Magu	Yes	Yes	Yes	Yes
29	Makete	Yes	Yes	Yes	Yes
30	Masasi	Yes	Yes	Yes	Yes
31	Mbinga	Yes	Yes	Yes	Yes
32	Mbulu	Yes	Yes	Yes	Yes
66	Mkuranga	No	Yes	Yes	Yes
67	Mugumu	Yes	Yes	Yes	No
68	Mwanhuzi	No	Yes	No	No
69	Orkesumet	Yes	Yes	Yes	Yes
70	Ruangwa	Yes	Yes	Yes	Yes
71	Rujewa	No	Yes	Yes	Yes
72	Sengerema	No	Yes	Yes	Yes
73	Sikonge	Yes	Yes	Yes	Yes
74	Tunduru	No	Yes	Yes	Yes
	National Projects Water Authorities				
75	Chalinnze	No	No	No	Yes
102	Mlowo - Mbozi	No	No	No	No
103	Mangaka	No	Yes	Yes	No
104	Mhunze	No	Yes	No	No
105	Sanya	No	No	No	No
106	Turiani	No	No	No	No
107	Sangamwalugesha	No	No	No	No
108	Lalago	No	No	No	No
109	Longido	No	No	No	No

S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission		S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission 2009/10		S/N	Utility Name	Business Plan	Board of Directors	Licence Application	Annual Report submission 2009/10
33	Misungwi	Yes	Yes	Yes	Yes		76	HTM	No	Yes	Yes	Yes							
34	Monduli	No	Yes	Yes	Yes		77	KASHWASA	Yes	Yes	Yes	Yes							
35	Mpanda	Yes	Yes	Yes	Yes		78	Makonde	No	Yes	Yes	Yes							
36	Mpwapwa	Yes	Yes	Yes	Yes		79	Mugango-Kyabakari	No	Yes	Yes	Yes							
37	Muheza	Yes	Yes	Yes	Yes		80	Wanging'ombe	No	No	Yes	Yes							
38	Muleba	Yes	Yes	Yes	Yes		81	Maswa	No	Yes	No	Yes							
39	Mwanga	Yes	Yes	Yes	Yes														
40	Nachingwea	Yes	Yes	Yes	Yes														
41	Namanyere	No	Yes	Yes	No														
42	Namtumbo	Yes	Yes	Yes	Yes														
43	Nansio-Ukerewe	Yes	Yes	Yes	Yes														
44	Ngara	Yes	Yes	Yes	Yes														