

CHALINZE WATER SUPPLY & SANITATION AUTHORITY



ANNUAL PROGRESS REPORT FY 2014/2015

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1. INTRODUCTION.

1.1 Chalinze Water Supply and Sanitation Authority (CHALIWASA).

The Chalinze Water Supply and Sanitation Authority (**CHALIWASA**) was officially declared in the government notice on **30th November 2012**. Initially it was known as the National Water Project which was initiated by the Government of the United Republic of Tanzania in the 1980's. CHALIWASA is answerable to the Board of Directors appointed by Hon. Prof. Jumanne Maghembe (MP), the Minister responsible for Water with effect from 13th April 2013. **The objective of the Authority** is to supply water to communities in various villages of the **Coast and Morogoro regions** including the growing urban settlements of **Msata, Lugoba, Chalinze, Mdaula, Ubena-zomozi** and surrounding villages. The main goal of CHALIWASA is to be independent Authority which affords cost of operation and maintenance of machines also paying staff salaries until 2016 due to Strategic Plan (2011 – 2016). The functions of CHALIWASA are defined by various legal documents related to provision of water supply and sanitation services and other policy, guidelines and regulations issued by the Ministry of Water (MoW) and Energy and Water Regulatory Authority (EWURA). CHALIWASA is guided by the following vision and mission statements:

Vision

To be the best and autonomous water supply and sanitation services provider to Chalinze and beyond.

Mission

To provide adequate, clean and safe water as well as efficient and proper disposal of waste water to Chalinze service area and abide to environmentally and hygienically acceptable high quality.

The Executive Board of Directors.

The CHALIWASA Executive Board has **11** members namely:

1. Eng. Vitalis P. Mnyanga - Board Chairman
2. Eng. Alphonse C. Mganga - Regional Authority's representative
3. Mr. Ibrahim Matovu - Bagamoyo District Council representative
4. Mr. Mussa Msakamali - Business enterprises' representative
5. Mr. Mohamedi Kikwete - Domestic users' representative
6. Major General J. F. Kwapwani - Major consumers' representative
7. Deceased. Replacement in progress- Women group representative
8. Eng. David Mseni - Representative for WAMACHA
9. Eng. Blangsson Hamisi - Representative from Ministry of Water
10. Hon. Francis Mbode - Councilors' representative
11. Eng. Christer T. Mchomba - Board Secretary - Manager

1.2 Chalinze Water Supply Project (CWSP).

The Chalinze Water Supply Project (**CWSP**) Phase I was implemented in the year 2001 with a target of supplying water to **105,000** people by the year 2015. The construction of the project completed in the year 2003 whereby the scheme was commissioned to provide service to the community of **20** villages. Phase I of Chalinze water supply was financed by the Government of the People's Republic of China in collaboration with the Government of Tanzania.

The implementation of Chalinze water supply was planned to be in two phases. The first phase of the project was designed to cover **20** villages after its construction. The villages covered in phase I are: **Pingo, Bwilingu, Pera, Msoga, Mboga, Lunga, Saleni, Diozile, Mindutulieni, Mazizi, Msata, and Kihangaiko** in the south direction. In the north direction the following villages were covered, **Mandela, Hondogo, Kilemera, Kikaro, Miono, Rupungwi, Kimange and Mbwewe**. However, there are **36 villages** from Phase II that have been completed and are currently serving water to the community. The villages are **Mkange, Mihuga, Mandamazingara, Masimbani, Kweikonje, Masuguru, Madesa, Pongwe msungura, Kiwangwa, Fukayosi, Kidomole, Makurunge, Mkenge, Msinune, Kinzagu, Makombe, Talawanda, Msigi, Kisanga, Mindukeni, Vigwaza, Buyuni, Visezi, Chamakweza, Chahua, Gwata, Gumba, Magindu, Lukenge, Pongwe kiona, Kwang'andu, Kifuleta, Kwaruhombo, Msolwa, Mdaula and Matuli**.

The coverage for both phases are **88% (220,241)** of the total population (**276,669**) of the served area (census 2012) up to March 2015 i.e. some of the sub-villages in the villages in the phase **II** do not receive water services. Therefore more efforts need to be made to deliberately complete the construction of the remaining works

The cost for **phase I** was **Tshs 23.4 billion** and the following infrastructures were implemented: Intake structures, clarifier tanks, filter tanks, dosing room, clear water pump house, **2000 m³** clear water tank, **5** mid-way pumping stations, **3** clear water tanks of **300 m³** and **6** clear water tanks of **500 m³**, **461 km** of the transmission main pipes and **127 km** of the distribution pipe lines this include phase I and II, telecommunication facilities, administration building, staff quarters, electricity and the communication points. The design capacity of the intake is to produce **7,200 m³/day** which will also accommodate requirements for the ongoing phase II. The transmission pipes are also designed to accommodate demand for phase II.

Phase II started construction during 2008, with a total cost of Tshs **53.7 billion**. The funding is a contribution from the Government of the Peoples' Republic of China (**Tsh. 5.6billion**); The Bank of Arab Development in Africa (BADEA) (**Tsh. 10.8 billion**) and Water Sector Development Programme (WSDP) (**Tsh. 37.3 billion**). Phase II of Chalinze water supply covers **47** additional villages in **3** Districts namely Bagamoyo (**38**), Kibaha (**4**) and Morogoro rural (**5**). Due to its complexity the project was divided into **9 packages** (A, B, C, D, E, F, G, H & J). Two

packages i.e. Packages F and H were implemented using funds from BADEA while package J (villages in Morogoro rural including Military camps) were implemented by using grant from Chinese Government. The remaining packages (A, B, C, D, E and G) were implemented under the Water Sector Development Programme & GoT. The project is ongoing.

Phase III for Chalinze Water Supply Projects contract agreement was signed on 18th May 2015 between the Dar Es Salaam Water and Sewerage Authority (Employer) and M/s Overseas Infrastructure Alliance (India) Pvt Ltd & Pratibha Industries Ltd Consortium (Contractor). The Government of Tanzania has Secured a Letter of Credit (LoC) for **41,362,020 million USD** from Indian Government.

The consultant M/s WAPCOS was appointed for preliminary design for Phase III project in Chalinze component as well as supervision of works.

The following items of works are expected to be done under this project:-

- Rehabilitation and extension of treatment plant by 800m³/hr (included rehabilitation of Intake, Construction of one Clarifier and filter).
- Construction of 19 storage water tanks and one clear water tank with capacity of 1000m³
- Construction of clear water tank of 2,000M³ at Mazizi hill.
- Construction of 499 Water kiosks.
- Supply and laying water pipes system with approximate length of 1,139Km both in transmission and distribution networks (348 km transmission and distribution in main villages, 791 km for internal distribution systems sub-villages).
- Rehabilitation/upgrading of existing unit at treatment plant and at all the existing and under construction boosting station.
- Installations of 21 fire hydrants.

CHALIWASA is supported by the Chalinze Water User Association (WAMACHA - Jumuiya ya Watumiaji Maji Chalinze), which is involved in consumers' mobilization and protection of the infrastructure. WAMACHA is a legal entity, registered as COWSO in accordance with the Water Supply and Sanitation Act No. 12 of 2009.

2. DEPARTMENT ACTIVITIES

2.1 Personnel and Administration Section.

(i) Employment

Currently, the Chalinze WSSA has **119 staffs** working in various areas of the scheme. **21** staff are Government's permanent employees and **85** staff are employed by the WSSA on **2** yrs contracts, whereas **13** staff are employed on **6** month temporary contract. Out of **119** staffs **26** are female employees.

(ii) Transport

The Chalinze WSSA has Eight **(8)** vehicles and Five **(5)** motorcycles, all in good working condition.

(iii) Communication

The Chalinze WSSA has internal telephone communications and internet connection, which enable the communication within and outside the area. The internet connection via fiber cable has reached at Wami Head office.

2.2 Technical Department.

(i) Planning and Construction.

(a) Implementation for Chalinze Water Project Phase II FY 2014/15.

During FY 2014/15 the WSSA continued with implementation of package A, B, C, D, E, F, G, H and J the progress up to 30th June 2015 is as follows:-

1. Package F & H

On 5th November 2013, The Ministry of Water signed the contract with a new contractor **M/s Badr East African Enterprises Ltd** to complete the **remaining works** which include Wami Clarifier, two booster pumping stations, R.C Ground and Elevated reservoirs (Ubenazomozi, Lulenge and Tukamisasa), supply and installation of transmission pipelines, complete installation of valves and all accessories, construct Guard houses and water kiosks. The overall physical work progress is estimated to be **73%**. However some people at **Mdaula, Matuli and Msolwa** are currently receiving water from the completed works in their villages. The remaining villages that are yet to receive water are Tukamisasa, Kaloleni, Ubenazomozi, Mwidu and Visakazi.

2. Package J

This package was implemented by **M/S Wuhan Water Construction Engineering Company** from China. However the extension of pipeline reached at **99%** and rehabilitation of communication system is **50%**. A total population of **24,925** from villages of Kidugalo, Ngerengere, Sinyaulime, Bwawani, Gwata, Kinonko, Sangasanga, Kizuka military camp will benefit from this package of which depends on package F and H. Currently the pumps and transformer have been installed and the pressure testing performed from Ubenazomozi pumping station to Kidugalo line. The testing process has shown positive results as from August 2015, the water started to flow smoothly through Sangasanga & Kizuka military camps up to Kidugalo village. The testing is ongoing from the Ubenazomozi pump station to Kinonko village line. The Ministry has planned to finalize the rehabilitation of the communication system through funds

provided through Phase VI of the Chinese Technical Cooperation, of which its agreement is expected to be signed during October 2015.

3. Package A (Lot 1)

This package was implemented by **M/S Oriental Engineering Co. Ltd** from Kenya. The contract was signed on 13/8/2010 and was **officially handed over on 25th March 2014** after Defect Liability Period (DFP) and the **project completion is 100%**. A total population of **10,912** from villages of **Mihuga, Masimbani, Kweikonje, Mandamazingara, Kwasunga and Mkange** are currently benefitting from this package and the project is operational.

4. Package B (Lot 2)

The implementation of Package B up to 30th June 2015 is **99%**. This package is under Defect Liability Period (DLP) after final inspection conducted on February 2015 of which the contractor instructed to rectify the snags as per original contract. Apart from original contract the approved additional works will be implemented during DLP **now the implementation of additional works is 80%**. Villages of **Masuguru/Mwetemo, Kiwangwa/Mwavi, Fukayosi, Kidomole, Mkenge, Msinune, Pongwe Msungura, Madesa na Makurunge** are receiving water from this package. Currently all villages receive water.

5. Package C (Lot 3)

This package is being implemented by **M/S D. B Shapriya & Co** from Tanzania. The contract was signed on 23/3/2011. A total population of **13,180** from villages of Kinzagu, Makombe, Talawanda, Malivundo, Msigi, Kisanga and Mindukeni will benefit from this package. The implementation of Package C up to 30th June 2015 is **98%**. The remaining works are construction of 1 Nos water kiosks, finishing works of 13 Nos water kiosks, fixing 19 Nos of manhole covers, installation of 150 Nos out of 640 Nos marker posts, Tilling and sanitary works at Msigi and Kisanga guard houses. Also there are additional works approved to be implemented concurrently. People at **village of Kinzagu, Makombe, Talawanda, Msigi, Kisanga na Mindukeni**) are currently receiving water from the completed works.

6. Package D (Lot 4)

This package is implemented by **M/S Building Water and Earthworks Ltd** from Tanzania. The contract was signed on 13/8/2010. A total population of **14,931** from villages of Chamakweza, Vigwaza, Buyuni and Visezi will benefit from the package. The implementation of Package D up to 30th June 2015 is **96%**. The remaining works are painting of boundary wall, painting of storage tank, landscaping and access road. All villages of **Chamakweza, Mbala, Vigwaza, Buyuni** and **Visezi** are currently receiving water after installing a Pressure Reducing Valve and constructing a temporary Water Break Pressure Tank.

7. Package E (Lot 5)

This package is being implemented by **M/S Badr East Africa Enterprises** from Tanzania. The contract was signed on 13/8/2010. A total population of **12,090** from villages of Chahua, Gwata, Gumba, Magindu and Lukenge will benefit from the package. The implementation of Package E up to 30th June 2015 is **99%**. As per final inspection conducted, the contractor is implementing/completing the rectification of snags as instructed by the inspection team to comply with original contract before handing over the project after DLP. People at Village of **Chahua, Gwata, Gumba, Magindu na Lukenge** are receiving water currently.

8. Package G (Lot 6)

This package is being implemented by **M/S Zonghao Overseas Construction. Eng. Co. Ltd** from China. The contract was signed on 13/8/2010. A total population of **13,093** from villages Kwan'gandu, Pongwekiona, Kifuleta and Kwaruhombo will benefit from the package. The implementation of package G up to 30th June 2015 is **99%**. After testing the pressure of the transmission line towards Kwaruhombo and Kifuleta villages, part of it (length of 500m) failed, and so the contractor was instructed to order and replace with new pipes. However, people at villages of **Kwang'andu, Pongwe kiona and Pongwe mnazi** are receiving water currently.

(b) Status of implementation for Chalinze Water Project Phase III.

During FY 2014/15 (up to 30th June 2015) the WSSA continued with implementation of ongoing works of the phase III, and the progress is as follows:-

- (i) The site was handed over to Contractor on 7th July 2015.
- (ii) Sampling of soil on areas where storage tanks, intake, Clarifier and clear water tanks will be constructed.
- (iii) Water Kiosks to be rehabilitated/upgraded were identified.

(ii) Operation and Maintenance

(a) Production.

Currently there are **21** pump units for Production and distribution that are in good working condition (**see appendix i**). The remaining **6** pumps are under maintenance stages. The design capacity of the Intake and the Water Treatment Plant is to produce **7,200 m³/ day**. However, the current average demand is **13,294 m³/day** and daily supply is **6,286.69 m³/day**. The increase in demand has been caused due to the increase in population connecting to the system which is yet to be completed. Under normal condition, the supply is **24 hours** per day. The quality of treated water was also good which met the International Standards (**WHO**).

(b) Tanks

There are **49 water distribution and Storage tanks** ranging from **50 m³** to **2,000 m³** within the project area with a total storage of **11,800 m³**. All tanks are in good working conditions **see appendix ii**.

(iii) Commercial Operations.

Up to **30th June 2015** we have **2,804** connections where the number of private customers was **2,296** and **508** kiosks or Public water points in various areas of the scheme. All customers are metered (**100%**). The number of service hours is **24hrs** it is informed that customers are satisfied with the supply service provided.

The billing system is computerized and bills are prepared on monthly basis. However, they are still distributed to customers by door to door dispatch. The billing efficiency stands at **45.57%** and Revenue collection efficiency stands at **62.65%** whereas the revenue collected for the FY 2014/15 was **Tshs 1,875,961,988.31** against **Tshs 1,299,122,579/=** in the FY 2013/14 which is an increase of **Tshs 576,839,409.31/=**. The increase of revenue collected was due to increase of new connections, close monitoring during the collections.

(iv) Finance.

The actual expenditure for the year 2014/15 is **Tshs 3,188,179,429.17**, where PE and OC is **Tsh 1,079,010,986/=**, while development activities expenditure were **Tshs 32,419,050/= (incremental expenditure)**. However, the year expenditure was budgeted to spend **Tsh 3,590,459,039/=**. The TANESCO bill for FY 2014/15 is **Tshs 1,017,764,314.5/=** this makes a total outstanding cumulative bill to date to reach **Tshs 3,874,206,194.70** up to June 2015.

3 (A) ARCHIVEMENTS FOR THE FY 2014/15.

- (i) **Completion of Package A (Lot 1):** which **officially handed over on 25th March 2014** where total population of **10,912** from villages of **Mihuga, Masimbani, Kweikonje, Mandamazingara, Kwasunga** and **Mkange** are currently benefitting from this package and the project is operational.
- (ii) **Completion of Packages B,C,D,E and H: (Masuguru, ,Kiwangwa, Msinune, Fukayosi, Kidomole, Makurunge, Mkenge, Pongwe Msungura, Madesa, Kinzagu, Makombe, Talawanda, Malivundo, Msigi, Kisanga, Mindukeni, Chamakweza , Vigwaza, Buyuni, Visezi, Chahua, Gwata, Gumba, Magindu, Lukenge, Msolwa, Mdaula na Matuli)** the progress is on finalisation stage and some of the village already benefitting the services that makes transmission pipe to increase **91 km** and make a total of **461 km**. Increase of distribution network from **33 km** to **127 km** also completion of **36** storage tanks.
- (iii) Installation of: **443** new connection; **325** Domestic; **10** Institutions; **19** Commercial and **89** Kiosks.
- (iv) Purchase of **4 Bulky Meters**.
- (v) Purchase of **1 motorcycle**.

- (vi) **Signing of contract** with Vodacom Company Ltd to install and provide Mobile payment system; that will improve distribution of bills, collection of revenue and enabling easy advertisement to customers.
- (vii) **Purchased** tools & various spare parts, Office facilities (computers, printers, scanners, Laptops), Water Laboratory equipment and reagents, Water bowser & Cesspit emptier trucks and construction of four (4) staff house/ units (two bed-rooms)

3 (B) PLAN/STRATEGIES FOR THE FY 2015/2016.

- a) To complete the remaining works of the Chalinze Water project phase II and inaugurate;
- b) Continue supervision of Phase III Chalinze water supply project implementation;
- c) Prepare Tariff review application for EWURA consideration;
- d) Preparation of CHALIWASA New *Strategic Plan (2016/2017-2020/2021)*;
- e) Extension of Distribution pipeline and new connections in order to increase from **2,258** to **3,758** customers;
- f) Reduction of Non Revenue Water (NRW) from current **54%** to **45%** by purchasing and installing four (4) and Bulk water meters.
- g) Purchase Two (2) Data Loggers to improve meter Reading as well as Billing efficiencies.
- h) Conduct Water meter verification, testing, calibration na replacement by starting with 1500 meters. The meters are those with age from 5 years and beyond.
- i) Conduct in-house and outdoor short training/courses/seminars to staff of all cadres, in collaboration with the MoW, ATAWAS, EWURA and GiZ.
- j) Operationalise M-pesa mobile phone paying system to improve revenue collection efficiency and customer care;
- k) Operationalise Bulky Water Supply by starting with villages served under Morogoro (R) and Kibaha (R) Districts as a pilot. This is expected to minimize operational costs and improve revenue collection efficiency;
- l) Conduct Land survey, Land and assets valuation and obtain Title deeds for all Chalinze project are, in collaboration with District councils (Bagamoyo, Kibaha and Morogoro);
- m) New connections to be installed to customers: **3,000** domestic; **10** Institutions; **30** commercial and **5** industries;
- n) To purchase **Eight (8)** motorcycles to increase meter reading and collection efficiency and maintenance activities;
- o) Improve the collection efficiency by (i) campaigning and creating awareness to the customers through advertisements and (ii) making frequent surprise visitation/inspection to ensure safety of customer meters and/or accuracy of meter readings;
- p) Continue conducting the Customer survey to know our customer base and Customer data to be updated in order to ease follow up of debtors and be incorporated into the SBM;

- q) To verify customers record and debtors to be entered correctly on Smart Billing Manager (SBM) and troubleshooting for all problems in all modules in order the system to be stable;
- r) Improve leakage detection by attending leakages immediately after they are reported (45 minutes);
- s) Continue reducing the commercial losses by (i) conducting in-house training of the meter readers (ii) conducting monthly check ups and (iii) monthly verification of the data collected;
- t) Prepare Monitoring programme of customer water meters in order to increase efficiency in the billing and reduce customer complaints;
- u) Purchase a Min-bus for staff transport to and from the office.

4. PERFORMANCE INDICATORS.

A. TECHNICAL INDICATORS.

(i) Supply and Demand.

- (a) Estimated water demand **13,294 m³/day** in the FY 2014/15.
- (b) Quantity of water produced **6,286.69 m³/day** In the FY 2014/15.
- (c) Total No. of pumps available **30**;
 - For Production; number of operational pumps is **4** out of **4**.
 - For Distribution; number of operational pumps is **17** out of **23**.
 - For Backwash; number of operational pumps is **3** out of **3**.
- (d) Total length of transmission main pipe is **461 Km**.
- (e) Total length of Distribution pipeline is **127 km**

(ii) Production from Various Sources (in m³/annual):

Table 1 (A): Wami River Capacity.

Production Capacity	WAMI RIVER WATER SOURCE.	
	Wami River Source (m ³ /annual)	Total Capacity (m ³ /annual)
	FY 2014/15	FY 2014/15
Design Capacity	2,635,200	2,635,200
Present Capacity	2,300,927.69	2,300,927.69

Table 1 (B): Production FY 2014/15

1st Quarter Production	604,148.77
2nd Quarter Production	583,796.21
3rd Quarter Production	533,124.26
4th Quarter Production	578,858.45
Production FY 2014/15	2,300,927.69

(iii) Billed Water:

Quantity of billable water (**m³/annual**) - **2,297,685.22 m³/annual**

(Billable water = water distributed less leakages)

(b) Actual quantity of water billed (**m³/annual**) – **1,047,035 m³/annual**

(c) Non revenue water *((Production – Actual billed)/Production)* **0.54 (54%) due to Technical and Commercial losses;**

- 1) HDPE Pipes Vandalism
- 2) Maintenance of booster pumps
- 3) Tanks and HDPE pipe testing during phase II construction.
- 4) Major breakdown of DN 250 DI pipe in rain seasons at Chalinze.

(iv) Quality of Water Produced:

Table 2: Water Quality Parameter.

	pH Clear Water	Turbidity (NTU) Raw	Turbidity (NTU) Clear	TDS (mg/l) Raw	Chlorine (mg/l)	Fluorides (mg/l)	Fe (mg/l)	Mn (mg/l)	Nitrates (mg/l)	E-coli (No/ml)
1st Quarter	15.9	182.95	15.29	NIL	0.4	NIL	NIL	NIL	NIL	NIL
2nd Quarter	22.45	1,295.87	15.53	NIL	0.4	NIL	NIL	NIL	NIL	NIL
3rd Quarter	21.31	5,716	23.78	1,560	0.6	NIL	NIL	NIL	NIL	NIL
4th Quarter	20.51	1,543	20.53	756	0.3	NIL	NIL	NIL	NIL	NIL

(v) Quantity of Chemicals Consumed:

Table 3: Quantity and Cost of consumed chemicals.

	Aluminum Sulfate (Kg)	Sodium Chloride (Kg)	Algae Flock (Kg)	Soda Ash (Kg)S	Quarterly Total Cost (Tsh)
1st Quarter	5,959	2,862	0	0	6,900,858
2nd Quarter	17,413	3,128	170	0	20,201,446
3rd Quarter	49,320	3,422	639	0	50,693,080
4th Quarter	39,387	3,731	0	0	39,345,460
FY 2014/15 Total Quantiy (kg)	112,079	13,143	809	0	
FY 2014/15 Total Cost (Tsh)	109,978,404	2,628,600	4,533,840	0	117,140,844
Total coast of Chemical Consumed FY 2014/15					117,140,844/=

(vi) Power Source:

Currently TANESCO is the only source of power for production purposes. The **WSSA** has also a standby generator which is currently being used for office use only during power breakouts but not powerful to operate pumps due to low voltage.

(vii) Energy Consumption:

- (a) KWh consumed for the FY 2014/15 - **3,477,999 Vs 2,254,169** for the FY 2013/14.
- (b) Maximum kVA recorded for the FY 2014/15 – **414 Vs 364** for the FY 2013/14.
- (c) Other energy consumed for the FY 2014/15 - **N/A**.

B. SERVICE INDICATORS.

- (i) Average hours of service per day is **22 hours**.
- (ii) Proportion of consumers with **22hrs** service **85%**.
- (iii) No. of new water customer **443**, total customers to date (30th June 2015) **2,804**, No of active customers **2,683**.
- (iv) No. of new meters installed **443**, total No. of metered customer's to date (30th June 2015) **2,683**.
- (v) No. of disconnections **121**, No. of reconnections **52**, No. of illegal connections found **NILL**.
- (vi) Total No. of kiosks **508**, No. of Kiosks Working **478**, No. of metered kiosks **508**.
- (vii) Cost of 20 Lts Jerry can by Vendors is **Tshs 100-200** and by WSSA is Tshs. **50/=**.
- (viii) No. of poor households identified to date – **N/A**.
- (ix) No. of poor households getting free water – **N/A**.

Revenue and Expenditure from July 2014 to June 2015.**Table 4:** Revenue and Expenditure for the year 2014/15.

Revenue for the year 2014/15.					
Month	Water Sell	New Connections	Reconnection	Others/ Recovery	Amount (Tshs)
July 14	110,264,689.00	22,827,693.00	189,000.00	374,000.00	133,655,382
Aug 14	106,154,914.00	14,542,876.00	84,000.00	2,857,000.00	123,638,790
Sept 14	134,648,200.00	32,307,762.00	126,000.00	1,970,000.00	169,051,962
Oct 14	133,949,983.00	15,064,711.00	84,000.00	163,209,310.00	312,308,004
Nov 14	112,907,480.00	13,545,167.00	21,000.00	60,565,466.81	187,039,113.81
Dec 14	133,204,874.00	11,029,918.00	42,000.00	2,033,030.00	146,309,822
Jan 15	100,982,220.00	10,413,250.00	21,000.00	300,000.00	111,716,470
Feb 15	119,575,217.00	16,903,612.00	42,000.00	255,000.00	136,775,829
Mar 15	125,152,535.00	9,431,065.00	126,000.00	5,705,000.00	140,414,600
April 15	109,348,122.00	5,650,586.00	105,000.00	2,848,600.00	117,952,308
May 15	99,030,177.50	5,989,120.00	105,000.00	399,000.00	105,523,297.5
June 15	183,103,761.00	5,969,649.00	63,000.00	2,440,000.00	191,576,410
TOTAL	1,468,322,172.5	163,675,409	1,008,000	242,956,406.81	1,875,961,988.31

NB: Other revenue (Government Fund):

Salary **Tshs z177,899,200.00 /= P/ANNUAL**
Electricity **Tshs. 1,017,764,314.17**

WSSA Actual Expenditure for the year 2014/15.					
Month	Electricity (Tshs)	Chemicals (Tshs)	Personnel (Tshs)	Other O & M Cost (Tshs)	Total (Tshs)
July 2014	1,000,000.00	9,250,000.00	65,361,650.00	51,279,874.00	126,891,524
Aug 2014	1,300,000.00	0	66,731,430.00	36,346,200.00	104,377,630
Sept2014	2,150,000.00	7,000,000.00	79,881,230.00	53,636,200.00	142,667,430
Oct 2014	2,450,000.00	104,007,454.00	97,653,140.00	245,835,270.00	449,945,864
Nov 2014	600,000.00	4,720,000.00	91,429,781.00	28,205,840.00	124,955,621
Dec 2014	2,200,000.00	14,160,000.00	93,085,480.00	66,564,450.00	176,009,930
Jan 2015	8,536,000.00	29,555,680.00	66,748,220.00	51,421,350.00	156,261,250
Feb 2015	4,000,000.00	14,160,000.00	79,791,420.00	56,983,590.00	154,935,010
Mar 2015	4,112,075.00	17,082,116.00	76,071,092.00	48,681,981.00	145,947,264
April2015	1,568,000.00	8,850,000.00	71,088,480.00	55,173,430.00	136,679,910
May 2015	5,812,074.50	11,564,000.00	50,168,980.00	31,298,774.50	98,843,829
June2015	1,300,000.00	17,346,000.00	95,519,933.00	60,834,720.00	175,000,653
TOTAL	35,028,149.5	237,695,250	933,530,836	786,261,679.50	1,992,515,915

Operational Expenditure for the Year 2013/14. (WSSA + MoW)					
Month	Electricity (Tshs)	Chemicals (Tshs)	Personnel (Tshs)	Other O & M Cost (Tshs)	Total (Tshs)
July 2014	83,184,597.28	9,250,000.00	78,677,750.00	51,279,874.00	222,392,221.28
Aug 2014	99,811,719.43	0	80,047,530.00	36,346,200.00	216,205,449.43
Sept 14	92,658,607.26	7,000,000.00	93,197,330.00	53,636,200.00	246,492,137.26
Oct 2014	98,205,853.12	104,007,454.00	110,969,240.00	245,835,270.00	559,017,817.12
Nov 2014	96,355,853.12	4,720,000.00	105,200,881.00	28,205,840.00	234,482,574.12
Dec 2014	87,109,140.32	14,160,000.00	105,853,580.00	66,564,450.00	273,687,170.32
Jan 2015	78,227,031.12	29,555,680.00	80,126,320.00	51,421,350.00	239,330,381.12
Feb 2015	93,875,616.36	14,160,000.00	93,169,520.00	56,983,590.00	258,188,726.36
Mar 2015	81,954,304.32	17,082,116.00	93,562,192.00	48,681,981.00	241,280,593.32
April 15	76,446,619.96	8,850,000.00	88,854,580.00	55,173,430.00	229,324,629.96
May 15	77,216,393.10	11,564,000.00	67,935,080.00	31,298,774.50	188,014,247.6
June 15	87,746,728.28	17,346,000.00	113,836,033.00	60,834,720.00	279,763,481.28
TOTAL	1,052,792,463.67	237,695,250	1,111,430,036	786,261,679.50	3,188,179,429.17

(xi) **Distribution of Connections:**

Table 5: Number of customer up to June 2015.

Category→	Domestic	Institutional	Commercial	Industrial	Kiosk	Total
Total	2,104	81	99	12	508	2,804

(xii) **Total Number of Metered Connections:**

Table 6: Metered Connections up to June 2015.

Category→	Domestic	Institutional	Commercial	Industrial	Kiosk	Total
Total	2,104	81	99	12	508	2,804
Working	2,036	74	87	8	478	2,683
Not working	68	7	12	4	30	121

(xiii) **Number of Population Served:**

Table 7: Population served

Category→	House hold	Kiosk/yard tap kiosk	Total
Total Connections	2,296	508	2,804
Average number of people served per connections			
Pop. Served			

Total population in the service area (census 2012) are 276,669.

(xiv) **Records of Leakage and Pipe Materials.**

Table 8: Number of Leakage and pipe materials used.

Category→	GS Pipes	Polyethylene	PVC	Steel	Cast Iron	Ductile Iron	Others (mention)	Total Water Losses (m3)
Number of Leaks	11	210	45	NIL	1	3	12	3,242.47
Pipe breaks/km/Annual	NIL	1.04	NIL	NIL	NIL	NIL	NIL	

(xv) **Complaint.**

- No. of consumer complaints received on lack of water/low pressure – **NIL.**
- No. of complaints received on water quality – **NIL.**
- No. of days used to attend a major breakdown annually (if any) - **2**
- No. of days used to attend a major leak annually (if any) - **4**

C. FINANCIAL INDICATOR.

- i. Total O&M costs **Tshs 3,188,179,429.17/=**
 - a. *(Total O&M costs = total O&M expenditure plus Government subsidies on electricity and salaries)*
- ii. Operation & Maintenance expenditure (expenditure for water maintenance) **Tshs 513,538,280/=**
- iii. Operating revenue (total collection from water services) **Tshs 1,468,322,172.5/=**
- iv. Personnel expenditure WSSA - **Tshs 933,530,836/=**
- v. Unit cost of water produced (**Tshs/m³**) without depreciation – **Tshs 1,385.61**
 - a. *(Total O&M Costs without depreciation/Total production)*
- vi. Unit cost of water produced (**Tshs/m³**) with depreciation – **Tshs 1,662.732**
 - a. *(Total O&M Costs with depreciation/Total production)*
- vii. Total arrears **Tshs 514,758,512/=**
- viii. Total Average annual billing for 2014/15 **Tshs 1,555,137,605/=**
- ix. Contribution to investment **NIL**
- x. Actual expenditure WSSA - **Tshs 1,992,515,915/=**
- xi. Actual budget **Tshs 4,676,781,011/=**
- xii. Total investment
 - Government funded project **Tshs NIL**
 - Donor funded project **Tshs NIL**
 - WSSA funded project **Tshs NIL**
- xiii. **Annual Water Billing:**

Table 9: Number of Bills.

Category→	Domestic	Institution	Commercial	Industrial	Others/Kiosk	Total
Amount of water billed (m3)	453,945	166,755	138,438	31,602	256,295	1,047,035
No. of bills Prepared	23,790	1,005	1,078	144	0	26,017
Value of bills prepared (Tshs)	544,734,000	203,441,100	213,194,520	49,141,110	544,626,875	1,555,137,605
No. of bills Dispatched	23,790	1,005	1,078	144	0	26,017
No. of bills Paid						

xiv. **Annual Revenue Collection: 1,875,961,988.31**

Table 10: Revenue collected.

Category→	Domestic	Institutional	Commercial	Industrial	Kiosks/ Others	Total
Water sales	479,395,539.50	180,733,574	171,783,475	34,586,372	601,823,212	1,468,322,172.5
Connections						163,675,409
Recon. Fees						1,008,000
Application Form						4,780,000
Other Income						238,176,406.81
Total						1,875,961,988.31
Expected Revenue						2,994,407,825

xv. **Total arrears at the end of previous reported year 2013/14:**

Table 11: 2013/14 Arrears.

Category→	Domestic	Institution	Commercial	Industrial	Others	Total
Arrears (Tshs)	48,456,957	56,205,867	37,436,189	4,615,635	641,795	147,356,443

xvi. **Total arrears at the end of the year 2014/15:**

Table 12: 2014/15 Arrears.

Category→	Domestic	Institution	Commercial	Industrial	Others	Total
Arrears (Tshs)	238,001,547	166,456,053	102,128,962	7,214,050	957,900	514,758,512

xvii. Ageing of total Arrears **Tshs. 514,758,512/=**

xviii. Value of water billed (Tsh/annual) – **Tshs 1,555,137,605/=**

xix. Energy bills for the year 2014/15 – **Tshs 1,017,764,314.17/=**

(a) Amount paid for Energy this year 2014/15 **Tshs. 35,028,149.5/=**

- By the MoW **Tshs NILL**
- By the WSSA **Tshs 35,028,149.5/=**

(b) Total outstanding Energy bills to date 30th June 2015 **Tshs. 3,874,206,194.7/=**

- To the MoW **Tshs. 3,872,892,484.35/=**
- To the WSSA **Tshs. 1,313,710.35/=**

xx. Total WSSAs unpaid debts (to suppliers) to date (2014/15) **Tshs 261,575,030/=**

D. PERSONNEL INDICATORS.

- (i) Total No of employees - Degree **14**, Diploma **9**, FTC **3**, Form IV/ Artisans **48** Other **45**
- (ii) No of female employees **-26**.
- (iii) No of staff left for any reason **7**.
- (iv) No. of vacant posts – **64**.

E. GENERAL INDICATORS.

- (i) No. of Board meetings held: **13 Nos**, Regular **10 Nos** and Extraordinary **3**.
- (ii) No. of all Board Committees meetings held – **6 Nos**.
- (iii) Any review of tariffs done (Yes/No)- **NO** If yes give details of Tariff structure and rates.
- (iv) Strategic Plan and Cost Recovery Plan in place (Yes/No) - **YES**.
- (v) OPRAS/Performance contract in place and used (Yes/No) - **YES**.
- (vi) Financial, Purchase, Safety and Staff Regulation in Place and used (Yes/No) - **YES**.
- (vii) Scheme of services in place and used (Yes/No) - **YES**.
- (viii) Training policy in place and used (Yes/No) – **YES**.
- (ix) No. of stakeholder meetings held **1 Nos**.
- (x) No. of Vehicles **8**; Working **8**: No. of Motorcycle **5**; Working **5**.

Appendix i: Status of working Pumping Stations.

Station	Total No. of Pump Set	Pump set Number	Description	Remarks
INTAKE (Production)	4	No. 1-3	In good condition	working
		No. 4	In good condition	working
DOSSING	10	Chlorine Pumps No. 1	In good condition	Working
		No. 2 & 3	In good condition	Working
		Alum Pumps No. 1 - 3	In good condition	Working
		Motor for chlorine and Alum	All are in good condition	
		Electrolysis Machine No. 1		Not working
		Electrolysis Machine No.	In good condition	

		2		
TRANSPORT (Distribution)	8	No. 1,2,3 (Back wash pump)	In good condition	working
		No. 5,6,8	In good condition	working
		No. 4,7	In good condition	working
SOUTH I (Madesa) (Distribution)	4	No. 1	In good condition	working
		No. 2	In good condition	working
		No. 3 & 4	In good condition	working
SOUTH II (Kihangaiko) (Distribution)	6	No. 1,2&4	In good condition	working
		No. 3,5&6	Non-return valves and Motor rewinding	Not working
NORTH I (Mandera) (Distribution)	4	No. 3	In good condition	working
		No. 2	Repair on pump casing & Impeller	Not working
		No. 1&4	Repair on pump casing, Non-return valve Mechanical seal, Motor rewinding & Auto transformer	Not working
NORTH II (Makole) (Distribution)	2	No. 1	In good condition	Working
		No. 2	In good condition	Working
NORTH III (Hondogo) (Distribution)	2	No. 1	In good condition	Working
		No. 2	In good condition	Working

Appendix ii: Existing Distribution and Storage tanks

Location of the tank	No.	Capacity (m ³)	TOTAL (m ³)
Phase I Tank			
Wami Tank	1	2,000	2,000
North 1	1	300	300
North 2	1	300	300
Miono	1	500	500
Mbwewe	1	500	500
South1	1	300	300
South2	2	500	1,000
Mboga	2	500	1,000
TOTAL PHASE I	10		5,900

Tank Phase II			
Masugulu	1	50	50
Kiwangwa	1	400	400
Fukayosi	1	100	100
Mkenge	1	50	50
Pongwe msungura	1	50	50
Mkange	1	150	150
Madesa	1	50	50
Pongwekiona	1	100	100
Kifuleta	1	150	150
Kwaluhombo	1	150	150
Kwang'andu	1	100	100
Chahuwa	1	100	100
Gumba	1	250	250
Magindu	1	150	150
Lukenge	1	100	100
Vigwaza	1	400	400
Makombe	1	50	50
Kinzagu	1	50	50
Mindukeni	1	300	300
Msigi	1	50	50
Kisanga	1	50	50
Mbwewe	1	200	200
Mihuga	1	100	100
Ubenazomozi i	1	450	450
Msolwa	1	150	150
Masimbani	1	100	100
Mdaula	1	300	300
Mandamazingara	1	100	100
Kweikonje	1	50	50
Matuli	1	100	100
Ubenazomozi ii	1	150	150
Mwidu	1	100	100
Kaloleni	1	150	150
Tukamisasa	1	150	150
Kizuka A	1	200	200
Kizuka B	1	500	500
Ngerengere	1	100	100
Sangasanga	1	100	100
Kidugalo	1	50	50
Total Phase II	39		
Grand Total	49		11,800