Osun State Water Corporation

Review of Organisational, Technical, Financial And Commercial Structures including PSP assessment

(September 2008)

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WATER SUPPLY & SANITATION SECTOR REFORM PROGRAMME OSUN STATE TECHNICAL UNIT

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Acronyms

BLF	Bread of Life Dev. Foundation
CSO	Civil Society Organization
EU	European Union
EIA	Environmental Impact Assessment
ESA	External Support Agencies
FGN	Federal Government of Nigeria
FPIU	Federal Project Implementation Unit
FMAWR	Federal Ministry of Agriculture and Water Resources
PSP	Private Sector Participation
РРР	Public-Private Partnership
IGR	Internally Generated Revenue
LGA	Local Government Authority
NUWSRP	National Urban Water Sector Reform Project
NWSSP	National Water Supply and Sanitation Policy
NEEDS	National Economic Empowerment and Development
	Strategy
NGO	Non governmental Organization
NUWSRP	National Urban Water Sector Reform Project
MDG	Millennium Development Goal
STU	State Technical Unit
SWAs	State Water Agencies
TOR	Terms of Reference
WIMAG	Water Investment Mobilization and Application Guidelines
WSS	Water Supply and Sanitation
WSSSRP	Water Supply and Sanitation Sector Reform Programme

Chapter One : Introduction

1.1 Purpose of this study

The European Commission is presently supporting Osun State to improve its water governance under the Water Supply and Sanitation Sector Reform Programme (WSSSRP) in Nigeria. The Water Supply and Sanitation Sector Reform Programme has the specific objective of increasing access to safe, adequate and sustainable water and sanitation services in the state.

In July 2008, the **Bread of Life Development Foundation** was contracted by the **EU** - **WSSSRP**, State Technical Unit, Osun State in July 2008, to undertake two specific tasks:

- **a.** Review the organisational, financial, commercial and technical structure including PSP assessment of OSWC and make recommendations for improvement as considered appropriate with a view to making its operations more efficient and effective leading to sustainability.
- **b.** Recommend and develop restructuring plan for Osun State Water Corporation to improve efficiency and effectiveness of its services delivery for sustainability of its operations.

1.2. Terms of Reference

The following are the specific terms of reference of this study:

- a. Review the current organizational, technical and commercial operations of the OSWC including HR (organization, capacity, prerogatives, gender equality), operating cost and revenues, management structure, production and distribution process.
- b. Propose restructuring options, to enhance efficiency and effectiveness, for discussion, approval, adoption and finally implementation.
- c. Prepare Partnership Agreements between States Authorities and the joint SRIP/WSSSRP LGAs to define their roles and responsibilities. They will help establish effective collaborative ways of working together and working with other agencies for the improvement of water supply and sanitation
- d. Analyze the tariff structure and revenue collection; propose improvements in terms of customer satisfaction, willingness to pay, social aspects and sustainability bearing in mind that the financial yield should enable the OSWC to cover the full costs of operating and maintaining water supply (and wastewater) services and meet capital costs where possible.
- e. Carryout financial audit of OSWC for the last 3 years.
- f. Prepare medium term forecast highlighting demand increase, new network to create (assets, investment), needs for maintenance and budget for operation
- g. Review of procedures: procurement, budgeting, decision process, expenditure process

- h. Carryout Impact assessment of the reform on selected stakeholder groups.
- i. Prepare immediate plan for support to public campaigns in SRIP/WSSSRP focal LGAs on shortcomings in WATSAN service delivery and their impacts on poverty and gender equity.
- j. Design of communication strategy between OSWC, the customers and the private sector
- k. Determination of the means of water distribution and tariff fixing based on affordability, willingness to pay, ability to pay with reference to pro-poor policy.

As part of the commercial review of the OSWC, this study is also expected to specifically carry out the commercial review in detailed as described below:

- a. Develop guidelines for cost of service estimate and revenue estimate and financial projections
- b. Design and Introduce an efficient billing and revenue collection system
- c. Develop guidelines for tariff setting taking into account affordability for the poorest and supporting regular revisions
- d. Develop recommended models for PSP in O&M and management, including implementation; where advisable (support for preparation of tender dossier, contract document, evaluation)
- e. Develop guidelines for promoting constitution of water vendors associations
- f. Develop action plan for Sensitisation campaign for water users and promoting constitution of water users association (WUAs)
- g. Develop framework and modalities for training of WUAs on their roles in the budget monitoring and how to identify, expose and report corruption cases.
- h. Develop customers' relations, and mechanism for establishing periodic consultation between WUAs and OSWC

1.3. Executive Summary

This document contains the Review of Organisational, Technical, Financial And Commercial Structures including PSP assessment for the Osun State Water Corporation (OSWC) based on outcome of a six week study undertaken by the Bread of Life Development Foundation, using methodologies such as filed visits, consumer surveys, participatory meetings, and desk stop review of secondary data, key information interviews, and a financial audit of the OSWC

The document is divided into seven chapters. The first chapter introduces the study outlining its purpose, the terms of reference, the Executive Summary, associated document, methodology adopted to carry out the study, and acknowledgments

The second chapter dwells on the review of relevant literatures on the need to, and how to turn around ailing Public water utilities, examining the elements of reform necessary to both improve the environment in the process. These are **Autonomy** – being independent to manage professionally without arbitrary interference by other, **Accountability** – being answerable to another party for policy decision, for the use of

resources, and for performance and **Customer orientation** – making greater use of Markets and the introduction of markets-style incentives.

This chapter also examines models of public utility reform and restructuring such as Cooperative utility, public private partnership, Corporatized Public Utility, Public corporation, Privatisation-Disinvestiture including the features as well as the advantages and disadvantages of each of these models. Features of an effective restructuring process as well as an examination of the Ugandan National Water and Sewerage Corporation (NWSC) and the Dutch water management model conclude this chapter.

Lastly, the chapter examines the various forms of Private Sector Participation in water supply.

Chapter three outlines the current situation of the OSWC as it relates to its organisational, technical, commercial, and financial operations; Chapter four contains an assessment of this current situation by this study team; while Chapter five reviews the organisational, technical, commercial, and financial operations OSWC discussing policies and programmes that needs to be introduced towards turning around the fortunes of the utility. This chapter also contains an overview of stakeholder's views initiatives envisaged by this study to restructure the OSWC.

Chapter six discusses the restructuring plan of the OSWC under four headingsorganisational, technical, commercial, and financial operations; and the concluding chapter seven outlines the way forward for the OSWC.

1.4. Study Methodology

The following methods were adopted to undertake this study:

Assessment visits were paid to some of the existing water schemes at Esa Odo Water Scheme, Ilesa Zonal Office (Ilesa Water Works), Ile Ife Zonal Office (Booster Station) and Ede, Iwo, Eko ende, Ila Orangun and Ikire between July 22nd and August 7th 2008; with the aim of having on the spot assessment of the problems affecting the operational efficiency of a sample of the 14 existing water schemes.

Key informant Interviews were conducted with some officials of the Ministry of Water Resources and Rural Dev. and the OSWC in order to elicit the views on the study's TOR. Those interviewed include the Honourable Commissioner, Ministry of Water Resources and Rural Dev.- Honorable Olusola Komolafe; the Programme Manager, RUWESA, Alhaji Oluwatoyin Yussuf; the General Manager of the OSWC, Engr. Adepoju Adegbaju; and several other key management staff.

Consumer and Staff surveys: We administered two sets of questionnaires to gather stakeholder's opinions on various themes of the study. The first questionnaire titled: *"Consumers survey questionnaire"* contained 37 questions on the operational

performance and consumer expectations from the OSWC, and was administered on 88 consumers within 16 Local Government areas (LGA) of Osun state Water Corporation distribution service areas.

The second set of questionnaire featuring 14 questions was titled "OSWC staff survey questionnaire", and administered on 13 key of the Osun State Water Corporation (OSWC).

Participatory meetings: As part of this study, two stakeholder's workshops were organised with the support of the European Union Water Supply and Sanitation Reform programme, State Technical Unit, Osun State. A sensitisation workshop involving about 60 stakeholders was held at the commencement of the study on July 29, 2008, to gather inputs into the study's TOR; and a dissemination workshop was held between September 3-5, to inform stakeholders on major findings of the study and further gather their inputs.

Desk stop study of secondary data: The following documents were consulted as part of this study.

- a. Audited account and domestic report of Osun State Water Corporation, 2004.
- b. OSWC Stock valuation report for the past 3 years.
- c. OSWC Tariff structure.
- d. National Low Income Household Service Strategy (LIHSS)
- e. Model Water Supply and Service Regulatory Law (WSSRL)
- f. Model National Water Supply and Regulatory Handbook
- g. Water Supply Investment Mobilisation and Application Guidelines (WIMAG)
- h. Osun State Economic Empowerment and Dev. Strategy
- i. Draft Osun State Water Corporation law
- j. Capacity Assessment report of the Bauchi State Water Board
- k. Reports of the Institutional Assessment of the WSS agencies in Osun State
- I. Draft baseline survey of WSS in Osun State conducted by the FMAWR.

Financial Audit: A financial review of OSWC was conducted.

1.6 Acknowledgment

We wish to acknowledge the contribution of officials of the Osun State Ministry of Water Resources and Rural Development, Management and staff of the OSWC, and stakeholders that participated in the sensitisation and dissemination workshops held as part of this study, for contributing to the successful conduct of this study.

Special thanks goes to all staff of the **Water Supply and Sanitation Reform Programme (EU-WSSSRP)**, **State Technical Unit**, Osun State for providing all required support to carry out this study.

Chapter 2: Literature review

2.1. The crisis of poor water governance

The crisis in the water sector in most developing countries can be attributed to several factors, including the following:

- a. The apparent low priority that the Government give water sector issues. Confusion of social environmental and commercial aims
- b. Political interference.
- c. Poor managements structure and imprecise objectives for water undertakings
- d. An inadequate general legal frame work
- e. Lack of transparency in the award of contracts
- f. Non-existent, or weak and inexperienced regulators
- g. Resistance to cost- recovering tariffs

A sustainable water supply is a cornerstone of sustainable communities. Access to clean water and proper sanitation, and attention to wastewater disposal and treatment, has proven benefits to public health. Poor water and sanitation is an important cause of diseases. Generally, water is seen as embodying a bundle of social, cultural, environmental and economic values¹

Safe drinking water is fundamental to health, survival, growth and development. However, this basic necessity is still a luxury for over 50% of the citizens of Nigeria. Over 50% of Nigerians do not use drinking water from improved sources.²

"There is enough water for everyone. The problem we face today is largely one of governance: equitably sharing this water while ensuring the sustainability of natural ecosystems. " The MDG target with regards to water is to "halve by 2015 the proportion of people without safe drinking water". The enormity of the challenge of provision of safe water for the use of Nigerians and the drag that the failure to meet this challenge poses not only for Nigeria but the world at large with regards to meeting the MDG target for water is vividly captured by the draft DFID Country Assistance Plan (2004-2008) thus,

"Unless Nigeria reduces poverty the Millennium Development Goals (MDGs), both in Africa and globally, will not be achieved. Rapid progress in reducing poverty and achieving the MDGs is dependent upon improved access to basic services – particularly education, water and sanitation, and health"³. In

¹ UNESCO - Water a Shared Responsibility - The United Nations World Water Development Report 2, 2006

² Improved/safe drinking water sources have been defined to include water from the following sources piped water into dwelling, plot or yard, public tap/standpipe, tube well/borehole, protected dug well, protected spring, rainwater collection

³ DFID- Draft Country Assistance Plan (CAP) 2004-2008

urban areas of Nigeria, only 50% have access to piped water and while in rural areas only 35% of the people have access⁴. The Department for International Development (DFID) Participatory Poverty Assessment (PPA) found that the lack of access to potable water is ranked as the highest priority problem by rural populations⁵. The World Bank estimates that to increase coverage of safe drinking water to 80% by 2020 would require investment of over \$10 billion in water supply.

2.2. Water utilities: the need for restructuring

This not withstanding however, there is the challenge of providing water and ensuring sustainable long-term access to water which poses the question of how best to manage water provision. This realization has no doubt

Critical dimension of a well run (public of private) utility – basis for reform

- Autonomy being independent to manage professionally without arbitrary interference by other
- Accountability being answerable to another party for policy decision, for the use of resources, and for performance.
- Customer orientation making greater use of Markets and the introduction of markets-style incentives.

Source: GDLN series on Urban WSS reforms

led to the search for forms of restructuring of water and sanitation utilities that will ensure that water and sanitation services are delivered to the public especially the poor and the economically vulnerable groups.

Restructuring of water and sanitation utilities usually involves changes in both the organizational and operational aspects of utilities, including:

- a. Ownership
- b. Organizational structure (e.g. integration or separation of water and wastewater services)
- c. Operational management procedures
- d. Scale of operation (e.g. decentralization or regionalization/consolidation)
- e. Allocation of decision-making responsibility
- f. Involvement of stakeholders (e.g. community involvement in decision making)
- g. Regulation
- h. Accountability and oversight mechanisms

2.3 Water sector reform

In general, four elements of reform necessary to both improve the environment within which the utility operates, and to change the internal operations of the utility towards efficiency and effectiveness have been identified to include-,

a. **Getting the finances right:** this involves increasing the net income, improving financial management and exploring and accessing alternative financial sources.

⁴ Ibid

⁵ "Nigeria: Voice of the Poor" quoted in Nigeria - European Community Country Support Strategy and Indicative Programme for the period 2001 – 2007

- b. *Getting the institutional set-up right*: *i.e.* Separate policy making and regulation from utility functions in order to increase autonomy and accountability
- c. Improving service and information flows for customers including Improving information flows to customers, Making officials answerable to customers, and using collective customer information to improve policies
- d. *Increase efficiency within the utility* by Hiring, retaining, motivating and developing staff, decentralisation of responsibilities, authority and resources within the utility, developing technical and managerial capacity of utility and Introducing some form of competition

2.4. Models of Public Utility reform and restructuring

Generally, in the quest for reform and improvement of water and sanitation delivery, a number of models have been developed in different parts of the world, a model being understood to be a description of the ownership and organizational structure, and allocation of responsibilities and risks for operational management and/or infrastructure maintenance and improvement of a business. Below is a description of the different models of managing water utilities that has emerged from different parts of the world.⁶

Type of undertaking	Europe	Central America
Administrative	Amsterdam,	DIMA, San Pedro Sula,
departments or semi-	Netherlands' regies' in	Honduras
autonomous 'regies'	france.	
Public corporations	'Statwerke' in Austria	Guatemala, El Salvador
	Germany; ' aziende in	(municipally owned),
	Italy	Nicaragua and Honduras
		(state-Owned)
Limited companies	Netherlands, Sweden	Puerto Cortes Honduras.
(100% owned by public		
authorities)		

Table 1: Range of forms of public sector water undertakings

Source: Water in Public hands by David Hall

Public Corporation

A public corporation is a stand-alone agency or corporation that is specially created for the purposes of running a utility service or services at a regional or national level. They are public agencies, publicly owned and overseen and subject to public law. Public corporations are created under a special law or act drawn up specifically for the utility. The Public corporation business model is prevalent in Africa, Asia and Latin America where large numbers of public utilities were converted into "parastatals" in the 1970s and 1980s. Features of this model include:

⁶ Source: GDLN series on Urban WSS reforms

- a. Corporate structure: tasks, responsibilities and powers are defined in a special act.
- b. Government is the sole shareholder.
- c. Boards usually have representation from senior government officials.
- d. Autonomy in day-to-day operational management.
- e. Operates at provincial/state or national level.
- f. Vertically and horizontally integrated.
- g. Often externally audited rather than by a government auditor.

Advantages

- a. Provides economies of scale and scope.
- b. Required management expertise can be obtained.
- c. Management is autonomous.
- d. Finance may be accessed at favourable rates.

Disadvantages

- a. Requires rationalization and consolidation of industry, which may be politically unacceptable.
- b. Ineffective regulation may lead to abuse of monopoly power and inefficient management.
- c. The lack of effective regulation/oversight results in a lack of incentives for innovation.
- d. There is reduced transparency, accountability and user input into decision

Corporatized Public Utility

A corporatized utility is a publicly owned corporation that operates like a private business, under the direction of a board of management and with the government acting as the shareholder. It is subject to corporate law (rather than public law). In cases where the government owns the infrastructure and the corporatized publicly owned utility operates the infrastructure, the model shares similarities with delegated management. Corporatization is often a precursor to full privatization and is sometimes recommended as an intermediate step prior to privatization by international lending agencies such as the World Bank. Corporatization does not, however, necessarily imply full privatization⁷.

The possible legal status of such an external corporatized entity will depend on the specific laws of each country. These may have varying degrees of corporatisation and closeness to private company law:

- a. A special status municipal or state company, e.g. Azienda Speciale (Italy), Stadtwerke (Germany), Lilongwe Water (Malawi), SANAA (Honduras)
- b. A 'not for profit' company

Service providers: Variety of models

- Cooperative utility
- Public private partnership
- Small scale independent providers
- Aggregated town utility
- Corporatized Public Utility
- Public corporation
- Privatisation-Disinvestiture

⁷ Bakker, Karen - ibid

c. A company incorporated as a PLC under company law, but with shares owned 100% by the public authority (e.g. Netherlands water companies, SABESP (Brazil)), Debreceni Vizmu (Hungary)⁸

Corporatization

The Government department can transfer its assets to a Statutory, legal public body that is more autonomous entity) eg. Government owned PLC

Meaning of corporatization: not <u>IF</u> but <u>HOW</u>

Design of corporatization

The way the government exercises its ownership function

Multiple utilities ownership

Source: Urban WSS Reforms Global Context

Some features of the model include:

- a. A utility corporation may be profit or not-for-profit.
- b. A utility corporation may own assets and operate infrastructure or may operate infrastructure on behalf of an owner (e.g. a state government).
- c. A utility corporation has complete autonomy in day-today management.
- d. Government owns shares and appoints directors.
- e. Government may retain authority over key issues such as rates policy, diversification and acquisitions.
- f. Board may or may not have direct political representation from the Government.

Advantages

- a. Provides easier access to finance.
- b. Offers management independence.
- c. Financing is autonomous.
- d. Features commercial discipline.

Disadvantages

- a. Accountability to users is weakened.
- b. Commercial confidentiality limits access to information by consumers and politicians.
- c. May not be compatible with some public-service mandates.

The corporatized public utility business model is found in Western Europe (including Germany, the Netherlands, Italy and Belgium).

⁸ David Hall – Water in Public Hands

Community Cooperative

A cooperative is an enterprise owned and managed by the users of the goods and services provided. Users can be consumers, employees or producers of products and services.

Advantages

- a. Direct accountability exists.
- b. There is a high degree of user involvement.
- c. System is responsive to users' needs.
- d. Administrative costs may be lower.
- e. There is flexibility in design and technology.

Disadvantages

- a. Scale: smaller utilities may find it difficult to source finance.
- b. In the absence of a regulator, incentives for efficient operation may be lacking.
- c. Management expertise may be substandard; poor maintenance and/or deterioration of infrastructure may occur.
- d. Legislative framework and political governance culture may prevent this option.

In developing countries, even relatively large cities have cooperatively run water supply systems. The city of Santa Cruz, Bolivia, has run its water supply system as a consumer cooperative since the 1970s; it is regarded as having one of the best-run water supply systems in Latin America. Santa Cruz has achieved 94% water supply coverage of its population of 700,000—a rate significantly higher than that of most other Latin American cities.

Improvement in performance of the Santa Cruz water supply system over the 1990s was significantly better than that of Bolivia's two other major cities, in which water supply systems were run by the municipal government (Cochabamba) and by a private-sector operator (La Paz)⁹

Delegated Management

Under delegated management, an owner of water supply and/or sanitation infrastructure contracts out various aspects of water utility management to another entity, which may be either privately or publicly owned. To some degree, all utilities delegate: they may outsource various tasks to consultants or manufacturers of physical plants, for example. In the water sector, "delegated private utility" is understood to refer to outsourcing of core activities such as construction, operations and maintenance, and customer services. This model is also referred to as "private sector participation" by international financial institutions such as the World Bank. Examples of this handing over control to the private sector include:

a. A long-term concession or lease lasting decades, where the private company takes over the whole operation;

⁹ World Bank (2002). **Bolivia Water Management: A Tale of Three Cities** .*Précis.* Operations Evaluation Department. Spring 2002. Number 222.

- b. A lease arrangement where a company takes over the assets and management of a utility from the public sector (e.g, for 5 10 years);
- c. A management contract, where the private company supplies just senior managers;
- d. The private sector building and operating a new reservoir or treatment plant under what is termed a BOT scheme (Build, Operate, Transfer).

Features of delegated management contracts include:

- The participation of the private company does not extend to ownership of assets.
- Contracts are time-limited (between 1 and 30 years, typically).
- There are a wide variety of risk and responsibility-sharing options

Advantages

- a. Outsourcing of required expertise takes place.
- b. Potential access to finance is available.
- c. There is increased flexibility.
- d. Potential cost reductions arise from efficiency gains and increased innovation.

Disadvantages

- a. This requires skilful contract administration.
- b. Cost of capital may be higher
- c. The private sector may not have incentives to maintain assets; serviceability of assets may be an issue.
- *d.* Some delegated management contracts require extensive (and potentially costly) regulation.
- e. These are politically controversial, in part because of a perceived lack of transparency when a contract is signed with private company.
- *f.* Transparency and accountability to consumers is reduced, particularly in the case of long-term contracts.

Privatization (or Divestiture)

In the case of fully privatized utilities, private-sector corporations own and operate the water supply infrastructure. Relatively few examples of fully privatized water utilities exist. Where they do exist, they have usually been created through the sale of a public utility to the private sector, either through a public flotation or through direct sale to investors. In some jurisdictions, this model has been adapted to allow the government to participate as a part shareholder. Some features of the model include:

- a. The utility owns and may operate assets.
- b. Private companies usually operate as monopoly suppliers on a licensed basis.
- c. Government's central task is policy setting and regulation.
- *d.* Multidimensional regulation is in place: economic (capping prices or rates of return), environmental, water quality.

Advantages

- a. Access to finance is available.
- b. If regulation is effective, efficiency gains may occur.
- c. Innovation is likely, if regulation is effective.

Disadvantages

- a. Private companies may not take a long-term view; serviceability of assets may be a concern.
- b. Regulation is likely to be complicated and costly.
- c. Model is very difficult to reverse (relative to other business models).
- *d.* Regulation is information-intensive; works better with a larger number of comparators.
- e. Cost of capital may be higher, relative to perceived risk (including regulatory risk).
- *f.* With ineffective regulation, abuse of monopoly power is possible; efficiency gains may be limited.
- g. Prices may rise due to the higher cost of capital (which is not entirely offset by efficiency gains); in England and Wales, for example, water and sewerage bills rose steadily above inflation for the first decade following privatization in 1989 (Bakker 2001).

2.5. Features of effective Utility restructuring¹⁰

A well-managed restructuring process is invariably time consuming. For a re structuring plan to be successful however, all viable alternatives for the provision of water and sanitation, particularly to the poor in urban slum areas must therefore be explored.

This fact was further buttressed by a majority in the European Parliament which in a non-binding resolution on the EU's approach to water in the south insisted on "the need for local public authorities to be given support in their efforts towards establishing an innovative, participatory, democratic system of public water management that is efficient, transparent and regulated and that respects the objectives of sustainable development in order to meet the population's needs"¹¹

In order to ensure that all viable alternatives are explored a number of recommendations have been proposed amongst which are-

Define what good governance means for your community, and do so via an inclusive and democratic process. As a first step in restructuring, the government should define good governance principles and rank them in an inclusive, transparent review process that involves meaningful public participation. These principles, which should be coherent and ranked, will guide the restructuring process. A suggested list of good governance principles that the government may wish to consider include:

- a. Protection of public health and safety
- b. Environmental protection
- c. Accountability for stewardship and performance
- d. Transparency

¹⁰ UNESCO –Ibid

¹¹ European Parliament a non-binding resolution on the EU's approach to water in the south (September 2003), quoted in Translational Institute and Corporate Europe Observatory - **Reclaiming Public Water**

- e. Participation
- f. Equity, efficiency and effectiveness

The government needs to review the available business models, including the (improved) status quo, and consider the advantages and disadvantages of each before selecting a restructuring option. In its restructuring review, the government should consider an improved status quo as one of its restructuring options. In many instances, the most cost effective strategy will be to make service improvements internally prior to considering a significant restructuring in the operation and delivery of water services.

In its consideration of costs and benefits for the review of options for restructuring water and wastewater, the government should identify and quantify (where possible) synergies that would be lost as well as gained under each restructuring option. A broad-based review of water supply options available should be undertaken comparing all available options, including an "improved status quo" option, in a restructuring process.

This review process should be conducted in an open, transparent manner and involve meaningful public participation from all stakeholders, including citizens so as to allow for the full and fair comparison of different restructuring options.

Should the government decide to restructure, it should create a separate restructuring unit responsible for overseeing the restructuring process. Restructuring is a complex and time-consuming task; restructuring of water services is a vitally important process leading to vitally important decisions. The restructuring unit would be mandated to oversee the comparative study of restructuring options, recommend the most desirable option, implement the transition (if any), including the design and implementation of required regulatory frameworks.

If it decides to create an autonomous entity to run its water and wastewater supply services, the government should not lose sight of the fact that, as owner of the infrastructure, it remains accountable. The government should ensure that it has access to good information and resources sufficient to carry out its oversight duties. In the case of water, given its public health implications, this requires frequent and

Making a utility / Asset holder more autonomous

Government department:The government can transfer its assets.

Government owned PLC/Statutory body (separate legal entity) – To a public body that is more autonomous.

Joint stock company - To an entity party owned by the private sector Full divestitures is rare in WSS sector

comprehensive reporting to the government. In addition, the government may wish to require independent performance audits, conducted by a third party.

Because of the potential for conflicts of interest, the government should ensure that the advice it obtain from advisers, consultants and managers is impartial. Restructuring (particularly corporatization, private-sector participation and privatization) usually generates substantial fees paid to advisors and consultants. It is important to ensure that consultants/advisors retained by the government and its agencies/parastatals are independent. The government may wish to consider legal and contractual mechanisms to prevent advisors, directors and managers from benefiting from the restructuring process. These mechanisms might include a form of restrictive covenant; provisions in the procedures used to appoint directors; or changes to laws. Organizations and individuals advising the city on restructuring should have an armslength relationship to the process.

Contracts with external operating agencies should be made public before they are signed. The government should actively solicit the views of residents before entering into such agreements so that the community can have a role in determining the preferred course of action.

The restructuring process should take into account broader community goals, particularly with respect to sustainable community development. Because water supply touches on so many different aspects of a community's economic, environment and social well-being, broader considerations of sustainable

2.6. Case study of restructured Public water utility

The National Water and Sewerage Corporation (NWSC) Uganda¹²

The National Water and Sewerage Corporation (NWSC) was created as a governmentowned parastatal organization in 1972 under the national administration of Idi Amin Dada, serving only the capital Kampala as well as Entebbe and Jinja. Subsequently its service area gradually grew to incorporate large and mid-sized towns all over Uganda, reaching a total of 22 cities and towns in 2007.

In 1995 and 2000, it was reorganized under the NWSC Statute and NWSC Act, giving it substantial operational autonomy and the mandate to operate and provide water and sewerage in areas entrusted to it, on a sound, commercial, and viable basis. Internal reforms at NWSC started in 1998, beginning with a <u>SWOT</u> (Strengths, Weaknesses, Opportunities, Threats) analysis initiated by a new management team.

At that time, the utility benefited from a recently rehabilitated water and sewerage infrastructure including abundant water production capacity and a high level of metering, a competent senior management team, and a good and enabling water

¹² Much of this section is adapted from From Wikipedia - http://en.wikipedia.org/wiki/water_supply_and_sanitation_in_Uganda

legislative framework providing NWSC with relative autonomy. On the other hand, NWSC was in bad condition with regard to operational and financial aspects. For example, <u>non-revenue water</u>, water which is produced but not billed for several reasons such as leakage and illegal connections, stood at 60%. The utility was heavily overstaffed and staff costs accounted for 64% of the total operating costs.

In late 1998, the national government appointed Dr. William Tsimwa Muhairwe as general manager of NWSC. He had been managing public companies in Uganda and elsewhere. Under a new board, more emphasis was placed on commercial viability. At the same time, political interference within the utility was reduced. The new management soon drew up several programs to implement the principles, the first of which was the 100-days program, aiming to adjust operational and financial inefficiencies.

Since 2000, NWSC has worked under performance contracts with the national government, each covering three years. The contracts contain precise performance indicators, which the NWSC is expected to achieve. For example, the 2003-2006 contracts required NWSC to reduce NRW from 39% in 2003 to 36% in 2006. Simultaneously, inactive connections should be reduced from 21% to 13%. In order to encourage management to achieve the targets, an incentive element of 25% of the annual basic salary depended on the fulfilment of the contract. Each year the NWSC board decides the appropriate bonus rate that the NWSC management receives.

Results and analysis The improvement of the utility concerning access and operational performance is indisputable. Some of the achievements are:

	1998	2000	2004	2007
Operating profit before depreciation (<u>EBDIT</u>) (USh bn)	1.5	3.0	11.0	18.0
Non-revenue water	51%	43%	38%	33%
Collection efficiency	60%	76%	98%	92%
Connections	51,000	59,000	100,000	181,000
Employees	1784	1454	949	1388
Labor productivity (Employees/1,000 connections)	35	25	9	8

Performance indicators for NWSC (1998-2007)

Interestingly, the utility has been turned around without a tariff increase, except for inflation adjustments and a 10% increase to compensate the utility for a reduction in connection fees. Instead, the reform focused on increasing the number of connections, an effective computerized billing system, improving customer relations and communications, as well as better incentives and training for staff.

One factor that partially explains the drastically improved collection rates is a new government policy of paying the unpaid water bills of public entities, beginning in 1999. The significant increase in new connections is partially explained by a drastic reduction of connection charges, also in 1999, from 400,000 Shillings (US\$ 274) to 25,000 Shillings (US\$ 17). Flexibility in technical requirements (waiving of land title requirements, easing construction standards, post-processing of new connection forms) was also key to increasing water service coverage in the urban poor communities.

The success of NWSC since 1998 it has been noted was favoured by a high level of support by international donors and lending agencies as well as <u>national ministries</u>, the leadership of top management, a highly professional staff, and strong institutional cultures.

NWSC has received <u>ISO 9001</u>:2000 certification for nine of its service areas, including Kampala, by June 2007. The company also provides training to utilities in Tanzania and Zambia Building on its success; NWSC has set itself the vision "to be one of the leading water utilities in the world".

Financial turn	around o	f Phnom I	Penh Water supply authority (Cambodia)			
 New management team (incentive payment) 						
 Revolving to g 	Revolving to government owned company					
 Automated bi 	lling syster	m (replacin	g corrupt collectors)			
Customer surv						
Meter installa						
 Fines for illegation 	al connecti	on				
 Leakage reduce 						
 Automated ac 		& managem	nent system			
			sed on long-term			
protection mo						
p	1997 2004					
Connection	39,000	133,777				
Total revenues (Brief)	14.2	50.4				
Net income	-0.7	+ 8.4				
Unaccounted for water 65%		16%				
Collection ration 895		100%				
Average tariff (Rie/m3)	895	965				
Urban WSS Reforms Global Context						

2.7 Water Utility Governance model

Case study of the Dutch Water Board¹³

Local and regional water management in the Netherlands is largely decentralized. Water boards play a key role in this as a decentralized functional Government authority.

Water boards are considered to be the oldest democratic institutions in the Netherlands. From the 13th century onwards they were established in the lower-lying parts of the country. Nowadays the water boards encompass the whole of the country.

The Constitution and the Water boards Act (1992) established the water boards as decentralized functional government authorities. This means they have a dedicated task regarding local and regional water management. They are operationally independent to a high degree and supervised by the provinces

The water board is a government body of functional decentralized administration with its own governing body and financing structure. The water board as a public institution is based on the Constitution and the Water Boards Act.

It has legislative power in the formulations of by-laws and makes decisions with respect to budget, annual accounts, taxes, control, water level, licensing and water management plans. It also has the authority to employ executive coercion. The central government provides a national legal framework and a strategic policy. The provincial government supervises the water boards and is authorized to establish or dissolve them.

The basic elements of these water boards are democratic legitimacy, financial independence (guaranteed by the right to raise local taxes) and adequate integration into public law and administration.

Democratic legitimacy is found in the representation of various categories of stakeholders in the governing bodies of water boards. Representatives of the various categories are elected to their positions on the assembly.

The elections are based on the principle of `one person, one vote'. The functional character of the water board is reflected in the constitution of the water board assembly.

Every four years, the water board holds elections in each stakeholder category for the water board assembly. The water board has an executive assembly (about 5 seats), which is elected from the general assembly (about 30 seats), and a chairman. The chairman is not elected, but appointed by the Crown. The Dutch water boards keep

¹³ Rafael Lazaroms, Dimitri Poos, **Governance issues and National Water law: National Case Studies in Governance. Dutch Association of Water Boards,** The Netherlands

pace with developments in society. Although organizational structures, financial structures and the legislative framework are adjusted and updated continuously, the basic elements and principles remain intact.

The Dutch Government has decided that water management should be considered to be a public responsibility. At the same time, competition is encouraged.

Benchmarking and cooperation with the private sector outsourcing, public-private partnerships) are stimulated in the (waste) water chain. The Dutch Association of Water Boards creates benchmarks for its members on the effectiveness and efficiency of wastewater treatment.

2.8 Models of PSP participation

There are various models for private sector participation in Urban water supply. Some of these are discussed below:

a. Service contract (1-3 years)

Private companies are employed under service contracts to carry out certain narrowly define tasks (e.g. meter reading, billing services).

The public authority pays a fixed fee to the private utility to fulfil the service contract. The degree of risk transferred to the private sector is limited to the particular service task.

b. Management contract (3-5years)

Management extend a service contract to include the management of t he utility as a whole. Management risk is thereby transferred to the private sector. The private party is usually paid a fixed free and a performance-related bonus. As a further option between a services and a management contract, a management support contract is a possibility focusing on coaching the existing management and training its capacity. The payment system could also include incentives

c. Lease contract (10-12 years)

The private sector operates the system for a given period, but assets remain state-owned. The public sector generally remains responsible for financing new investment, and the private company for working capital and maintenance. The private sector is also responsible for collecting revenue that it used to fund its operation.

Lease contracts do not does not involve significant infusions of private capital, nor do they necessarily create a base from which to optimize entire water and waste systems. As result, the contractor's effectiveness in improving the service performance hinges on the government's ability to provide the necessary capital investments and direction. Misunderstanding over responsibility for 'maintenance' (Private) and 'Investment' (Public) can also arise.

d. Concession contract (15-30 years)

In a concession contract, the government turns over full responsibility for the delivery of water and waste water services in a specified area, including all related construction, operation, maintenance, collection, and management activities, to a private 'concessionaries' for a defined period of time (15-30 years). All assets normally belong to the public party.

The concessionaires is responsible for any capital investments required to build, upgrade, or expand the system, and for financing those investments out of the tariff level is establish by the concession contract, which also includes provision on how it may be change over time.

Financing for concession investment typically involves a combination of equity, loans from development banks and international debt and it remunerated by the users' tariff. Moving from guaranteed payments by government to anticipated revenues from customers increase the risk to the private sector party. This is particularly true of currency risk, as the revenues are local currencies, while debt payments often need to be made in foreign currencies.

e. BOT: Build-own -type contracts (10 to 20 years)

BO contracts are designed for Greenfield investments to bring private capital into the construction of specific infrastructure facilities such an s a bulk supply, reservoirs and drinking water or wastewater treatment plants.

The most frequent forms of BO contracts are BOOT: build, own, operate, transfer; BOT: build, operate, transfer; BLOT: build, lease, operate, transfer, DBFO: design, build, finance, operate; ROT: rehabilitate, operate, transfer

Under a BOT contract, the private firm basically fiancés, builds and operates a plan for a set period of time in accordance with performance standards set by the government

In return, the government agrees to purchase a minimum level of output (or to provide a minimum level of input, e.g. wastewater for a wastewater treatment plant) over time, regardless of the demand. The purpose is to ensure that the private operators can recover its cost over the contract period.

This makes it necessary for the government to estimate demand with some accuracy at the time the contract is set. Otherwise, it has to pay for water that is not being used if demand is less than expected.

The size and times frames associated with BOTs call for the development of sophisticated and often complicate financing packages. These frequently involves substantial infusion of equity directly from the private project developers (in the range of 10% to 30%), combine with debt from third parties usually international commercial banks or development banks

Chapter 3: OSWC current operational status

3.1 OSWC : Summary of findings

Year founded			1991
Contacts			Email:
			Osunwater@yahoo.com
Staff strength as at July 2008			504
			(418 males, 86 females)
Staff/1000 Connection ratio	Total Staff	<u>504</u> / 1000	72 staff per 1000
	No of Utility connections	7000	connections
Average Supply coverage		I	43%
No of water schemes			14
Monthly wage for the staff			N13, 224, 253.95k.
Revenue Collection Efficiency	<u>Total Revenue</u> Total Billing	<u>673,332,349</u> x 100 101,594,025	66%
Average Tariff	Total annual billing Total Consumption	<u>101,594,025</u> 26,311,390	App. 1:4
Value of Assets of the OSWC as of 2	•		N1.4b
Per Capital Consumption	Total Annual Consumption No of People served	<u>263,11390</u> 1,462,000	18 cum per person
Draduction (Dopulation being	(43% of the population)	75 990	F 10%
Production / Population being served per day	<u>Production volume</u> No of people served	<u>75,880</u> x 100 1,462,000	5.19%

Unit Cost of Production	Opr +main Cost	N <u>364,294,311</u>	Approx N13:1
	Annual Production	27,696,200	
 Operation Ration	Annual Opr + main. Cost	364,294, 311	5:1
	Annual Revenue	673,323,49	5.1
Accounts receivable Per month	End of year Debtor balance x	$x \underline{1} = \underline{279,892,696} \times \underline{1}$	N023
	Total annual billings	12 101,594,025 12	
% Ration of Cost Recovery	Annual Revenue	<u>67,332,349</u> x 100	18.49%
	Ann. Oppr + main Cost	364,294,311	

3.2. OSWC Organisational Structure

History

The OSWC was established as a result of the creation of Osun State from the old Oyo State in 1991. OSWC inherited the laws of the Old Oyo State Water Corporation. However, a draft OSWC law has been prepared but is yet to be passed to law by the State House of Assembly. The draft law which is presently being operated, states that OSWC is a semi-autonomous body and a unit in the State Ministry of Water Resources and Rural Development.

The following are the functions of OSWC:

- a. To control and manage all water works vested in the Osun State Water Corporation;
- b. To establish, control, manage, extend and develop water works as the Osun State Water Corporation consider necessary for the purpose of providing wholesome, potable water for consumption of the public and for domestic, trade, commercial, industrial, scientific and other uses;
- c. To ensure that adequate wholesome water is supplied to its consumers regularly and at such charges as the board may, from time to time determine;
- d. To control and supervise the sinking of boreholes by individuals or corporate bodies in the State and charge appropriate fees as the board may from time to time, determine;
- e. To conduct or organize the conduct of research in respect to water supply, water development and matters connected therewith and submit the results of such research to the Commissioner for formulation of policy;
- f. To develop, maintain and beneficially exploit water resources both natural and artificial;
- g. To determine rates charged in paragraph (c and d) and other service rendered, shall be such that revenue for any year would be sufficient or as nearly as may be to pay all working expenses, repayment due on loans borrowed by the Osun State Water Corporation for any extension works.

Mission Statement

The Mission statement of Osun State Water Corporation is to provide sufficient potable water to all inhabitants of the state in an affordable and sustainable way as it related to the expressed intention of the state Government and in accordance with the Millennium Development Goals (MDGS) policy.

Vision Statement`

The vision statement of Osun State Water Corporation is to increase water production from 40% of the coverage in 2006 to 100% in the year 2015 which is the millennium Development Goal (MDGS) year and in accordance with the expressed requirement of the State Government.

Corporate Charter

The charter of the OSWC as expressed in the Osun State Government SERVICOM social charter is thus:

We the Chairman, Board Members, General Manager and the entire staff of Osun State Water Corporation agree to publish over charter below which are.

- a. Ensure a sustainable water supply system development in the State.
- b. Secure for the present and future generations, an efficient use of potable water for domestic commercial and industrial consumers.
- c. Produce for distribution and consumption of the public sufficient potable water of World health Organization (WHO) standard frothier health and well being.
- d. Meet the national economic target of improving service coverage from 40% to 50% by the year 2006.
- e. Extend service coverage to 60% of the population by the year 2007
- f. Extend service coverage to 100% of the population by the year 2015

The charter further states that the Corporation is providing the following services for the public as right:-

- a. Construction and maintenance of dams
- **b.** Installation and maintenance of pumping and water treatment plants;
- *c.* Production and distribution to the public of potable water that meets the world Health Organisation (WHO) standard.
- d. Maintenance of existing distribution networks
- *e.* Providing facilities for the training of students on industrial attachment higher institutions
- *f.* Collection of hydrological for water supply development.

Governance

The draft law of the OSWC provides for a 16-member board of directors which is charged with the responsibility of laying down general policies in respect of the execution of all functions of OSWC; and consisting of the following members:

- a. A part-time Chairman appointed by the Governor
- b. Eight part-time members appointed by the Governor
- c. The General Manager of the OSWC appointed by the Governor
- d. Two representative of the consumers appointed by the Governor
- e. A representatives of the Ministry of health
- f. A representative each of the following:
 - *i.* The state Government as represented by the Bureau of Parastatals;
 - *ii.* Representative of the Ministry of Water Resources and Rural Development.
 - *iii.* The organised private sector as represented by the Osun State Chambers of Commerce Industry, Mines and Agriculture.

The draft law of the OSWC also provides that the qualification of Board Members b include the following:

- a. All Board members must be indigenes of Osun State;
- b. The Chairman should have water industry professional experience and must have achieved a reputable position in his career.

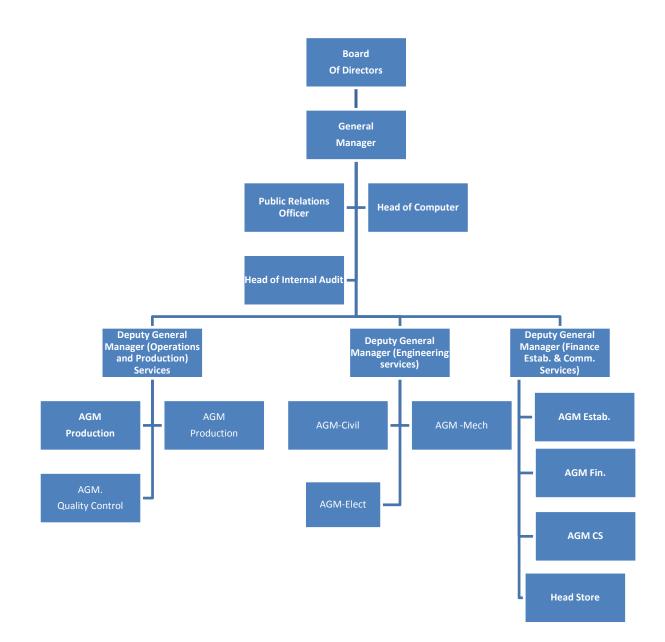
- c. Board members must be knowledgeable individuals preferably with a sound professional background in the water industry or with associated credentials whose abilities and experience complement the function of the Boar
- d. All the members of the Board, hold office for a term of four years, and may be eligible for re-appointment for four more years.

OSWC management

The draft law of OSWC provides for the appointment of a General Manager (GM) who is the Chief Executive of the corporation. He is appointed by the Governor on a performance contract basis. The tenure of the GM is 5years initially and can be extended for a period of another 5years. The GM is assisted by DGMs whose appointments are confirmed by the board and are in charge of the following departments in the corporation:

- a. Finance, Establishment and Commercial Services
- b. Operation and Production
- c. Engineering Services

Table 2: OSWC Organogram



Zonal offices

The corporation is also having nine Zonal Offices in the nine federal constituencies of the state and over thirty Commercial Offices spread across the state. The Zonal Offices are located as follows:

- a. Oshogbo Zonal Office
- b. Ikirun Zonal Office
- c. Ila Orangun Zonal Office
- d. Ede Zonal office
- e. Iwo Zonal Office
- **f.** Ikire Zonal Office
- g. Ile-Ife Zonal Office
- h. Ilesa Zonal Office
- *i. Ijebu-Jesa Zonal Office*

Human resources

According to OSWC figures, the Corporations has a staff strength of 504 comprising 86 Females and 418 males; out of this figure 153 are technically qualified and skilled staff, and 27 are professionally qualified staff.

In granting the Osun State Water Corporation autonomy to hire and fire staff, the draft law empowers the corporation:

- a. To engage such employees as may be necessary for the proper and efficient conduct of the business of the Osun State Water Corporation.
- b. The Management of Osun State Water Corporation may terminate the employment of any of its employees as a result of non performance of duties, continued lateness or absenteeism, insubordination, alcohol or drugs on the Osun State Water Corporation.
- c. The termination of senior Management members must be approved by the Board.

The table below shows the staff distribution and their qualifications in the General Manager's office, the three departments and the ten zonal Offices and the New Ede head works ¹⁴

¹⁴ Source: Osun State Nigeria Water Supply and Sanitation Institution Assessment Study 2007 Draft

Table 3: OSWC staff distribution

Department/ Zonal Office	No. of Staff	f Qualifications of Staff		
		Postgraduate Degree/Diploma	University/Polyte chnic Degree & Diploma	Others
Office of the General Manager	16	1	2	13
Finance, Establishment & Commercial Services	55	Nil	15	40
Engineering Services	35	Nil	12	23
Operations & Production	17	1	7	9
Oshogbo Zone	66	Nil	7	59
Iwo Zone	26	Nil	2	24
Ilesa Zone	33	Nil	2	31
lla Zone	30	Nil	1	29
Ikirun Zone	43	Nil	1	42
Ikire Zone	24	*	*	*
ljebu-Jesa Zone	20	*	*	*
lfe Zone	49	*	*	*
Ede Zone	34	*	*	*
New Ede Head works	36	*	*	*
Total				

* No information provided

Staff training

OSWC has a training plan for its staff which the management try to implement. The OSWC spends 5% out of its internally generated revenue to fund training.

Performance targets

The performance of the Corporation is monitoring on daily basis through:

- a. Keeping of record of daily activities.
- b. Keeping records of hours of water production at water work.
- c. Keeping records of maintenance work plant and equipment.
- d. keeping record of financial transactions in all our offices state-wide
- e. keeping records of staff matters.

Similarly the performance of the Corporation is published through the issuance of:

- a. Weekly report of activities.
- b. Monthly report of activities.
- c. Quarterly report of activities.
- d. Annual report of activities.
- e. External Auditor Report.

The performance targets of each of the major Departments in the corporation are as highlighted below:-

DEPARTMENT OF FINANCE, ESTABLISHEMENT S & COMMERICAL SERVICES

No.	Treatment of receive mails	Within 48 hours after collection
2.	Holding of management Meeting	2 nd Tuesday of every month
3.	Holding of fund managements	2 nd Wednesday of every month
4.	Holding of Broad Meetings	Six times of every month
5.	Preparation of staff salaries	the 1 st week of every month
6.	Submission of monthly Revenue Figures to the HQ	The 2 nd day of every new month
7.	Preparation of monthly Report of Activities	The 2 nd week of every month
8.	Production of consumers bills	Quarterly
9.	Reading of water meters	Monthly
10.	Preparation of annual budgets	September – October
11.	Preparation of appropriation accounts	January
12.	Personnel Audit of all officers	August
13.	Payment of claims to affected staff	January – February
14.	Stock taking of all items	Monthly
15.	Organisation of training for staff	January
6.	Revenue collection /generation/bill distribution.	Daily

ENGINEERING SERVICES DEPARTMENT

No	Activities	Targets
1.	Maintenance of plants and equipment	Daily
2.	Maintenance of vehicles	Daily
3.	Maintenance of booster station	Daily
4.	Upgrading /expansion of schemes	When the need arise
5.	Supervision of on-going project /contracts	When the need arise

DEPARTMENT OF OPERATIONS & PRODUCTION

No	Activities	Targets
1.	Production of water from all waterworks	Daily
2.	Maintenance of water work	Daily
3	Pipeline	Daily
4.	Supervision of all Zonal Offices	Daily
5.	Treatment quality monitoring of water across	Daily
	the sate	
6.	Allocation of chemicals to water works	Weekly/monthly

The staffs of the corporation participate in the Annual Performance Evaluation Report (APER). The report generated from the exercise is used to for staff promotion etc

Internal Communications

OSWC management holds a weekly appraisal meeting where the conditions of the each of the schemes are discussed and solutions to challenges facing the operational capability of the corporation are also discussed.

3.3. OSWC Technical Structure

Osun state Water Corporation (OSWC) is statutorily responsible for water supply to both urban and semi-urban settlements. Presently, OSWC manages 14 water schemes throughout the State. Out of the 14 water schemes, 11 (78.6%) of the schemes have a current operating capacity below 50%, while only 3 (21.4%) of the schemes have operating capacity of between 50% and 80%.

All the 14 water schemes have varying degree of constraints which include:

- a. aged plant and equipment,
- b. faulty and inadequate distribution system
- *c. unreliable power supply to the schemes*
- d. Low tariff, and
- e. Weak institutional framework

- f. Inadequate Water Works Installed Capacity arising from increase in demand
- g. Physical Leakages of water mains, service pipes, and appurtenances.
- h. Epileptic power supply to power the urban water schemes

The combined effect of these constraints is that, only about 40 % of the urban settlements in Osun State are presently served by OSWC.

The distribution networks which are mostly AC pipes are old and prone to frequent burst and illegal connections. Total number of active connections is over 7,000 which are about 50% of the total connections. In addition Plants and equipment in the water schemes are aged and have therefore lost their operating capacity, and as a result water rationing is common.

These problems lead significant drop in water productions and are responsible for the acute shortage and contribute immensely to poor service coverage. As a result, OSWC resorted to rationing of water to its customers.

Table 4: OSWC Operational Status

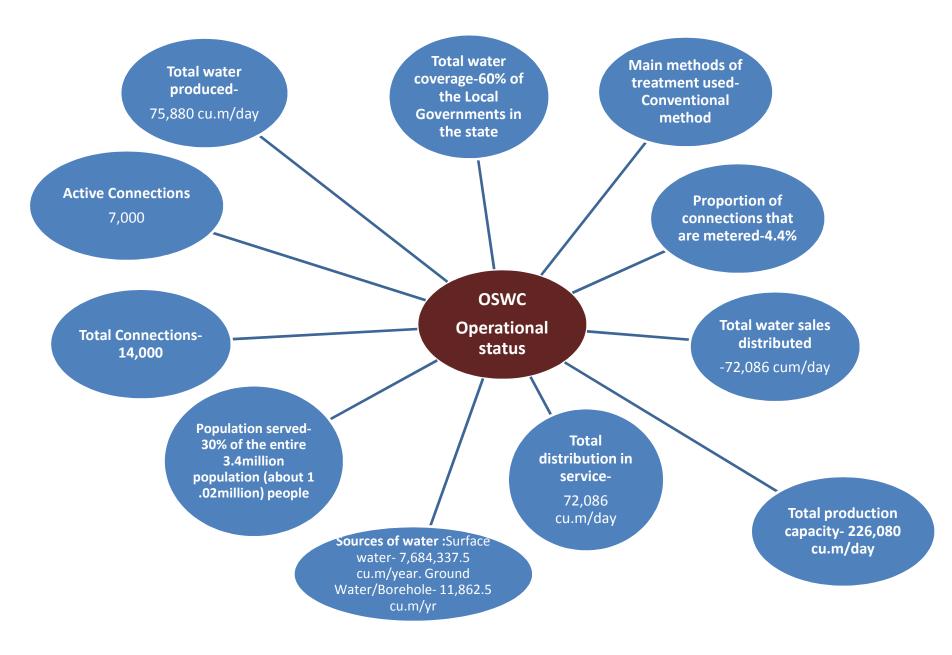


Table 5: Present capacity of OSWC water schemes

S/No	Name of Scheme	Year of Construction/Commissioning	Installed Capacity cu.m/day	Current Operating Capacity cu.m/day
1	New Ede Head Works	Completed and has been in operation since 1998	180,000	61,000 -30%
2	Old Ede Head works	Under Rehabilitation	9,000	0%
3	Eko-Ende Water works	Completed and has been in operation since 1973	12,000	3,500
4	Oyan Water works	Completed and has been operation since 1960	230	65 -30%
5	Ila-Orangun Water works	Completed and has been in operation since 1961	1,080	600
6	Igbajo Water works	Completed and has been in operation since 1998	1,800	1,000
7	Esa-Odo Water works	Completed and has been in operation since 1977	5,000	2,600
8	Ilesa Water works	Completed in 1952 and not in operation due to aged raw water line	N/A	0%
9	Erin-ljesa Water Scheme	N/A	800	100
10	Ikeji –Ile Waterworks	Completed and has been in operation since 1967	2,200	1,200
11	Ifewara Waterworks	Completed and has been in operation since 1960	420	200
12	Mokuro Water works	Completed and has been in operation since 1938	1,000	600
13	Ifetedo Water works	Completed and has been in operation since 1998	3,700	1,250
14	Iwo water works		9.080	3,180

3.4. OSWC Commercial Structure

For the purposes of collecting its water tariffs, OSWC operates 9 Area Offices and 46 Commercial Offices in the State. The customers of the Corporation include limited to the following

- a. Domestic household consumers.
- b. Commercial premises.
- c. Industrial consumers such as International Breweries Limited, Ilesa
- *d.* Institution of Higher learning such as Federal Polytechnic, Ede.
- e. Pure water operators-Sachets and bottled water
- f. Local government- maintaining Community Stand Pipes (CSP)
- g. Armed Forces such as Police and Army.
- h. Organized Private Sector
- i. Manufacturers Association of Nigeria

In 2006, average tariff collection from customers was about N5million per month, while in 2007, tariff collection so far, and ranged between N2.4 - N6.0 million per month.

The tariff structure of the corporation is set by the State Government based on the recommendation of a select team of the corporation's management committee. The current tariffs are listed below:

	Consumer class	Charges per month			
1.	Domestic consumers (Flat Rate)				
	Bungalow	N200 per month			
	Others	N200 per floor per month			
	Flat	N200 per flat per month			
	Duplex	N300 per month			
2.	Commercial /Industrial Consumers				
	Raw Water				
	Industrial fixed with MAN Rate	N15/per m3 (in case meter is faulty average			
	Industrial without MAN Rate	range of consumption			
	Treated Water				
	Big Industries	N50 per m3 or N20,000 where meter is faulty			
	Small-scale Industries	N50 per m3 or N10,000 where meter is faulty			
3.	Hotels				
	1 st Class: 5 Star Hotel	N75 per m3 or N10,000 where meter is faulty			
	2 nd Class: 2-3 Star Hotel	N60 per m3 or N7,500 where meter is faulty			
	3 rd Class: other Hotel	N50 per m3 or N500 where meter is faulty			
4.	Restaurants/Canteens				
	1 st Class	N50 per m3 or minimum of N1,500 per			
	2 nd Class	month			
	3 rd Class	N50 per m3 or minimum of N1,000 per			
		month			
		N50 per m3 or minimum of N500 per month			
5.	Construction Site				
	Large	N10,000 per month			
	Medium	N5,000 per month			
	Small	N2,500 per month			
	Residential	N1,000 per month			
6.	Recreation facilities	N500 per month			
7.	Hospitals				
	Government Owned	N50 per m3 in case meter is faulty			
	Private Owned	N2,000 per month			
	Small Private	N4,000 per month			
	Residential/Private	N500 per month			
8.	Car washing Depots	N50 per m3			
		In case meter is faulty N1,500 per month			
9.	Religious Places of worship & charitable	N300 per month			
10	Organisation	NEOO non month			
10.	Community Stand Pipe	N500 per month			
11.	Bank/financial institutions	N100 per m3			
12.	Institutions/Schools				
	Higher Institution, University, College of Education.	N30 per m3 or minimum of N5,000/month			

Table 6: OSWC Revised water rates from 1st January 1997

Private Sec./Primary Schools N25 per m3 or minimum of With boarding facilities N3,500/month Without boarding facilities N2000/month 13. Government Secondary /Primary N15 per m3 or minimum of N2,0 Schools without boarding homes month 14. Ministries /Parastatals N15 per m3 or minimum of N500 per 15. Poultry House N50 per m3 or minimum of	00 per		
Without boarding facilities N2000/month 13. Government Secondary /Primary Schools without boarding homes N15 per m3 or minimum of N2,0 month 14. Ministries /Parastatals N15 per m3 or minimum of N500 per	00 per		
13.GovernmentSecondary/PrimaryN15 per m3 or minimum of N2,0Schools without boarding homesmonth14.Ministries /ParastatalsN15 per m3 or minimum of N500 per	00 per		
Schools without boarding homesmonth14.Ministries /ParastatalsN15 per m3 or minimum of N500 per	uu per		
14.Ministries /ParastatalsN15 per m3 or minimum of N500 per			
15. Poultry House N50 per m3 or minimum of	nonth		
With more than 2,500 birdsN5,000 per month			
Medium-between 1000-2500 birds N3,000 per month			
Small-less than 1,000 N,1000 per month			
16. Complexes			
Shopping Complex (Room bases N50 per m3 or minimum of N	50 per		
assessment) shop/month			
	20		
	N50 per m3 or minimum of N,100 per		
shop/month	00		
17.Dry Cleaning/Laundry HousesN50 per m3 or minimum of N2,0	00 per		
month			
18. Policy/Army Barrack without meter N200 per m3 or minimum of b	etween		
N50,000			
N200,000 per month per barrack de	ending		
on size of barrack			
19. Markets & Motor Parks			
Motors Parks N500 per month	NSUU per month		
Markets			
-Big N1000 per month			
-Medium N750 per month			
-Small N500 per month			
20. Slaughter Slabs N30 per m3 or minimum of N500 per			
-Local government N50 per m3. In case there is no	meter		
-Private minimum of N1000 per month			
21. Block marking industries N50 per m3 or minimum of			
Large N1000 per month			
Medium N750 per month			
Small N500 per month			
22. Petrol Station N25 per m3 in case there is no	meter		
minimum of N500 per month			
23. Tanker Services (Treated Water) N1,500 (within Oshogbo)			
Private Tankers N1,500 per trip			

1.	New connection Fee		
	Application Form for New Connection	N500	
	19mm-25mm (3/4" – 1")	N2,000	
	30mm – 38 (1 ¼ - 1 ½)	N,3000	
	50mm and above (2" above)	N10,000	
2.	Water Reconnection Fee		
	(for Disconnected Consumers)		
	Commercial Consumers	N2,500	
	Residential /Private Consumers	N1,000	
	Industrial Consumers	N10,000	
3.	Meter Installation Cost	N10,200 (once and for all	
		payment)	
4.	Meter Rentage		
	Commercial	N250 per month	
	Industrial	N1,000 per month	
5.	Penalty for illegal connections		
	(a) 19mm-25mm (3/4" – 1")	N5,000	
	(b) 30mm – 38 (1 ¼ - 1 ½)	N7,500	
	(c) 50mm and above (2" above)	N20,000	
	(d) Un-metered Commercial Consumers	N5,000	
	(e) Illegal Drawing of water from water		
	Hydrant of water Corporation.	N5,000	

Table 7: OSWC Connection fees from 1st January 1997

1.	Water Development levy	N50 per taxable adult
2.	Registration of plumbers	
	a. Registration Fee	N500
	b. Renewal Fee	N250 per annum
3.	Registration of Contractors	
	Petty contractors	
	Contracts worth ¥ 5,000. 00 − ¥ 50. 000.00	¥ 500.00
	Registration	
	Renewal	N250.00
	Contract worth ¥ 51,000.00 - ¥99,000.00	
	Registration	N1,000.00
	Renewal	N500.00
4.	Registration of Contractors	
	Major Contractors	
	Contracts worth N100,000.00 - ¥499,000.00	₩,2500.00
	Registration	₩1,250.00
	Renewal	
	Contracts worth N500,000.00 – ¥999,000.00	
	Registration	₩6,000.00
	Renewal	₩3,000.00
	Contracts worth N1, 000,000.00 and above.	
	Registration-	-₩ 12,500.00
	Renewal-	₩6,000.00
5.	Physio-chemical and bacteriological examination of well water	

Table 8: OSWC charges from 1st January 1997

Metering policy

The metering policy of the OSWC is implemented according to the following procedures:

- a. An Area Engineer / Manager locates Commercial / Industrial premises that require meter installation.
- b. The Area Engineer/Managers submits a report indicating the type of and size of meter required for the connection to the OSWC headquarters.
- c. The headquarters releases the required meter and directs the appropriate Area Engineer/Manager to install the meter
- d. After the connection, officials of the OSWC Operation & Production Department, as well as the Audit Unit inspects the installation and submits a report which is referred to the Commercial services Division for commencement of Meter reading.

- e. Consumers are provided meter consumers for record purposes. A copy of such cards is kept by the Meter Reader for reference.
- f. Metered consumers pay a minimum of N12, 500.00 for the replacement of faulty meters in their premises (depending on the size of pipe). If they didn't pay, this amount shall be spread on their bills

Customer service

The OSWC gathers customer complaints and grievances through the following dedicated Telephone lines:-

- a. 0808 433 7064
- b. 0807 264 6598
- c. 0703 204 2171 for messages only
- d. 035204914
- e. 035207978

The under listed telephone numbers of its top functionaries are also released to the public for lodging complaints.

Table 9: OSWC Customer service lines

No.	Names	GSM No.	E mail
1.	Engr. A. Adegbaju (General Manager)	0803 388 6792	
2.	Engr. O Owojuyigbe (Deputy General Manager E.S)	0803 371 2203	
	Prince K.O. Olanipekun (Deputy General Manager FEC)	0803 434 2269	
4.	Mr. O Olorunsogo (Deputy General Mr. O & P)	0803 384 7006	
5	Mr.C.O.Gbenjo (Servicom Officer)	0803 377 5576	
6.	Engr. O.K. Ajala (Area Engineer / Manager)	0803 680 5477	
7.	Mr. S.A. Adejumo (Area Engineer/Manager,	0803 433 3029	
8.	Mr. A.T. Aderinlewo (Area Engineer/Manager, Ede)	0805 306 2709	
	Mr. L.O. Abiona (Area Engineer/Manager, Ilesa)	0806 711 2127	
10.	Engr. I.B Bello (Area Engineer/Manger, Osogbo)	0803 395 6511	
11.	Mr. J.A. Alonge (Area Engineer/Manager, Ikirun)	0805 302 3995	
12.	Engr. E.A. Akinyale (Area Engineer/Manager, Iwo)	0803 526 7938	
13.	Mr. A Adegoke (Area Engineer/Manager,ijebu- jessa)	0803 502 7211	
14.	Mr. B.G. Odubiyi (Area Engineer/Manger, IKire)	0806 669 7544	
15.	Mr. S.T. Oladosu (Computer Manager)	0803 396 8826	<u>Osunwater</u> @yahoo.co m

Complaints could also be lodged with the under the mentioned principal officers of the State Government through the GSM number indicated in the SERVICOM charter of the Bureau of General services, office of the Governor, Osogbo.

- a. The Executive Governor Of Osun State;
- b. The Deputy Governor of Osun State;
- c. The Secretary to the State Government
- d. The chief of staff to the Governor
- e. The Head of service of Osun State

3.5. OSWC Financial Structure

Funding

The State Government is the major financier of the State Water Corporation through its subvention and grants which is done through its yearly budgetary allocations. OSWC derives 20 % of its funding from its Internally Generated Revenue and the remaining 80% from the State Government in form of Subventions.

The following presents the budgetary provisions for OSWC and corresponding releases between 2005-2007:

Table 10: OSWC Budgetary allocation 2004-2007

	2004	2005	2006	2007
	N	N	N	N
Budget Allocation	225,864,704	270,962,201	198,021,282	298,921,205
Amount Released	412,496,771	250,096,131	366,795,908	250,363,418
Subvention and Subsidies	186,632,067	154,461,820	302,683,968	183,641,885
Total Funding	599,128,838	404,557,951	669,479,876	434,005,303

Table 11 : OSWC Internally Generated Revenue 2004-2007

	2004	2005	2006	2007
	N	N	N	N
Turnover	69,134,519	62,862,409	65,352,882	67,332,349
%	(5.5%)	(9%)	4%	3%
Increase/Decrease				

OSWC cost structure

The OSWC is allowed to spend 70% of Internally Generated Revenue on its Operation and Maintenance costs and also to supplement staff salaries to the tune of Naira 1million per month, while the remaining 30% is kept in a capital account. It however must secure the approval of the Governor before spending from the 30%.

It is pertinent to note that purchase of chemicals, water puritans and personnel cost constitutes the highest cost items in the corporation cost structure. The Corporations staff strength as at July 2008 is 525 while the monthly wage for the staff of the Corporation is N13,224, 253.95k. The OSWC also spends huge funds on procurement of fuel to operate the schemes as a result of erratic and inadequate supply of electricity.

The following charges is normally defrayed out of the revenue of the Osun State Water Corporation for any financial year-

- a. The corporation contributes N1m towards staff salaries on monthly basis while 5% of revenue generated is also contributed to Parastatals Pension Board (PPB) on monthly basis.
- b. All working and management expenses of the Osun State Water Corporation and all charges relating to its works, assets and other properties including proper provision for depreciation and renewal of assets
- c. Such expenses or minor works of capital nature as the Osun State Water Corporation considered necessary;
- d. Such sums of money including compensation which may be payable by the Osun state water Corporation to any person authority under this law or any other law.
- e. Taxes, rates and other levies payable by the Osun State Water Corporation under any applicable law:
- f. Interest on any loan raised by the Osun State Water Corporation
- g. Sums of money required to be transferred to any sinking funds or otherwise set aside for the purpose of making provision for the redemption of debentures, stock or other securities or the repayment of other loans; and
- h. Such other sums of money as the Government may approve for payment out of revenue account of the Osun State Water Corporation in respect of any financial year.

OSWC assets

The assets of the OSWC are valued at N1.4b as of 2007. All assets are fully owned by the corporation and none of them had been pledged or their ownership transferred to a third party in the last four years.

Table 12: Value of	OSWC Assets	2004-2007
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	2004	2005	2006	2007
	₽	₽	₽	N
Value of tangible	1,546,980,738	1,508,306,220	1,470,598,564	1,433,833,560
Assets				

Table 13: OSWC Balance sheet

	2004	2005	2006	2007
	N	N	N	N
Fixed Assets Add:	1,546,980,738	1,508,306,220	1,470,598,564	1,433,833,560
CURRENT ASSETS: Stock	00 007 EEO	97,957,027	67 697 417	77 242 200
Debtors	88,987,550 262,753,724	216,479,467	67,687,417 245,631,020	72,343,289 279,892,696
Bank Balance	15,179,893	47,333,514	25,195,073	19,523,099
Total Assets	1,913,901,905	1,870,076,228	1,803,114,074	1,805,592,644
Less:-				
CURRENT LIABILITIES				
Creditors	103,383,723	107,699,785	6,983,550	-
NET ASSET	1,810,518,182	1,762,376,443	1,802,130,524	1,805,592,644

Table 14: OSWC trade debtors

2004	2005	2006	2007	2	
N					
Trade Debtors	262,753,724	216,079,467	245,631,020	279,892,696	

Table 15: OSWC Profitability

	2004	2005	2006	2007
	Ν	Ν	Ν	Ν
Revenue Earned	69,134,519	62,862,409	65,352,882	67,332,349
Production Cost	(170,860,937)	(198,251,085)	(219,015,842)	(215,813,330)
Gross Operating Loss	(101,726,418)	(135,388,676)	(153,662,960)	(148,480,981)
Operating Expenses	(326,407,995)	(347,157,624)	(153,662,960)	(148,480,981)
Net Operating Loss	(428,134,413)	(482,546,300)	(544,941,837)	(537,114,305)
Other Income	15,637,642	14,073,878	12,666,488	11,399,839
Gov. Grant/Subvention	186,632,067	154,641,820		183,641,885
Excess Exp. Over Income	(225,864,704)	(313,831,102)	(229,591,381)	(342,072,581)
Gross Loss/ Profit Margin	(147%)	(215%)	(235%)	(220%)
%Increase/Decrease in Turn Over	(5.5%)	(9%)	4%	3%
%Increase/Decrease in Pro. Cost	11%	16%	10%	(1.5%)

The tables above show the precarious financial position of the corporation in the last four years. While the turnover in the last four years had not increased appreciably, the cost of production and operating expenses has continued to rise except in year 2007 when there was a marginal decrease of 1.5%. In the circumstance, the corporation has been operating at a gross loss and has been heavily dependent on the government to survive. The asset has also been grossly under-utilized and there is idle capacity at every work station

Procurement Procedures

The OSWC Procurement procedure is in line with overall procurement procedure of the Osun State Government, which is summarised below:

- a. All request to incur expenditure on procurement/award of contract/engagement of consultants; apart from those met from running cost shall be approved by His Excellency, the Governor after it has been so recommend by the Due process Office (DPO/BMPIU) to which the request would have been referred by the Governor for Review and Advice. The DPO/BMPIU – shall review such request in terms of price, budget provision, timing and whether or not the packaging is geared towards the realisation of government priorities and targets. The Revenue performance of the Ministry/ Agency/Institution would also consider.
- b. The Due process Mechanism shall encourage direct labour method of execution of project when it becomes necessary to execute direct labour projects, the approval of the Governor shall be obtained after Due Process clearance.
- c. For contract of N500,00.00 and below, the tender document shall be processed by the procurement Committee of each Ministry and Agency/Institution. It shall, thereafter, be forwarded to the DPO/BMPIU for Due process Certificate. After obtaining the Due Process Certificate, it shall be forwarded to the Honourable Commissioner or Board Chairman for approval before the contract award can be made.
- d. All contracts documentation shall be processed by the procurement committee in accordance with the existing State Government guidelines on procurement and award of contracts before forwarding same to the Due process office (DPO/BMPIU) for Due Process compliance review and certificate. The file shall be forwarded alongside Due Process Certificate to the Executive Governor or the State Executive Council (Depending on the value of the project) for approval before the contract is awarded.

Chapter Four: Assessment of OSWC Operational status

4.1 Assessment of OSWC Organisational structure

	Rating			Remarks
	High	Medium	Low	
Governance/ Autonomy			Low	The staff of OSWC is under the State Civil Service structure. The State Governor appoints members of the Board who most often are not professionals but politicians; their appointments is also often far behind schedules. The Board of the OSWC is not professionally staffed, since membership is based on political considerations. This invariably affect the quality of inputs members of the Board can make towards good governance of the OSWC. The General Manager is a Civil Servant and not contracted based on a Performance bound. He is therefore subject to the rules of the state Civil service. The State civil service commission is in charge of staff recruitment, discipline and dismissal. Needless to say, staff salary is on the civil service scale and there is no financial incentives to reward improved performance Level of efficiency of staff and attitude to work is civil service oriented and this hampers service delivery functions of the
				corporation. Basically because, the type of discipline and administrative control under a civil service structure does not promote goal congruence expected in a profit driven organization. <i>The</i> OSWC is essentially non autonomous. It is treated like a Government department, directly under the ambits of the Ministry of Water Resources and Rural Development, with the GM reporting to both the Hon. Commissioner (who is the political Head) and the Ministry's Permanent Secretary (who is the Administrative Head).
Strategic Planning			Low	OSWC does not have a Business, Corporate or Strategic Master plan. Last annual report available was in 2005, but it boosts of a charter expressed in the state SERVICOM.
Internal communication		Medium		OSWC holds weekly appraisal meetings to discuss state of water schemes, maintains a Notice Board for announcements, but does not publish in house newsletter.
Human resources -Skilled Manpower Staff distribution			Low	Lack of highly skilled staff: The OSWC only boosts of two staff with Post graduate qualifications. The Engineering services and Financial, Commercial and Establishment services department do not post of any staff with Post graduate qualification.

		r	
Staff Training			Generally, the Corporation is over staffed as the ratio of staff to active connections is 1:13.3. (525 staff are serving only 7000 active connections) Most of the staff are low skilled staff that are charged with collecting revenues for the OSWC. But political considerations seem to determine the postings of the OSWC staff. Though, there is no water production in Osogbo zone, 66 lower cadre staff are posted here, whereas Ede Zone where the most functional water works is situated has only 36 lower cadre staff. Also 33 lower cadre staff are attached to the llesa zone where no production or sales takes place. The OSWC is over staffed and in some zones, but under staffed in others. Capacity building of its staff through formal and structured training is almost lacking. OSWC does not have a Staff training School, nor sends its staff for regular training or refresher course. The corporation is empowered to spend up to 5% of its IGR on staff training, but this is basically in adequate to cater for the training needs of the work force.
Information management system	High		Well equipped computer unit. Billing system is computerised.
External relations and Stakeholder participation		Low	No form of consumer consultation in programme planning or implementation. No Consumer outreach programme such as talk shows or Media documentaries. The OSWC does not publish a newsletter, nor maintain a web site. It only boosts of an email. Though the Hot lines of corporation are made available are published in the SERVICOM, they are not effectively publicised through other media.
Accountability		Low	Accounts last audited in 2004. Major contracts not advertised for public bidding. Annual report not produced as scheduled and made available to the public.
Work tools			Inadequate equipments. Only 10 no Operational vehicles for the entire corporation. 20 computers in the entire corporation. Most of the water works are overgrown with weeds, with appalling state of furniture and fittings.

4.2. Assessment of OSWC Technical structure

General Assessment

- a. There are 14 water schemes that are under the management of the agency, most of which operate below 50% of installed capacity. Plants and equipment in the water schemes are aged and have therefore lost their operating capacity, and the OSWC spends a substantial part of its expenditure to procure fuel to operate the schemes as a result of erratic and inadequate supply of electricity
- b. Several of the service and distributing pipes of the OSWC have been damaged during road construction by Local Government Agencies. This obviously translates to UAW for the OSWC and low revenues from water sales.
- c. The OSWC presently does not have an efficient system of determining its volume of production as the water schemes are do not have a functional metering systems.
- d. There are no standards for determining and monitoring the quality of water quality as the water quality laboratory in most of the water works are either non functional or not manned.

Table 16:	State of OSWC	production facilities
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	Good	Poor	Remarks
Production volume		Poor	Generally, below 50%
State of Intake and Outtake facilities		Poor	Aged and covered with mud and water hyacinth
Communication equipments		Poor	Water works not connected with one another with Radio or Telephone equipments. Staff relies on GSM phones for communications. No records of routine interruptions in supply or infrastructure failures
Leakage detection system in transmission and distribution line		Poor	Equipments for detecting this has broken down
Monitoring of water levels		Poor	No Hydrological and hydro-geological tool for monitoring of water levels
Water treatment quality (standards, control facility),		Poor	Nigerian Standard for Drinking Water quality used, but most of the laboratories have broken down
UAW extension of metering, illegal connections		Poor	High UAW

New Ede Head works

New Ede Head works was commissioned in 1986, and is the largest scheme managed by OSWC with an installed capacity of 180,000m³/day. It provides portable water for use in 12 local government areas including the state capital. Presently, owing to ageing equipment and plaint, the capacity has reduced very considerably to about 250m3/hr when power supply is steady. Presently, it only supplies about 50,000m3/day of treated water to consumers. The major problems limiting service delivery are:

- a. The total power requirement at Ede Headworks is 9.6MVA as designed and installed. The scheme depends mostly on PHCH to operate at 9.6MVA, through there is an initial provision of 2Nos. 1.5MVA generators at the High lift Station and 1No. 840KVA at the low lift to back it up. It is however worthy of note that only 1No. 1.5 MVA generator is operational at the High lift Station now. Presently the scheme cannot be operated on generators because of high cost of diesel. Also, power supply from PHCN which is totally unreliable is one of the major problems facing the scheme
- b. High cost of funds expended in procuring diesel for the stand by old Generator; which averagely consumes a drum every hour.
- c. Faulty equipment; out of 3no low lift pumping machines, only one is preesnetly working; out of 16 high lift machines, only 7no are working.
- d. The water scheme requires the equipment to discharge its duties: 4no chlorinator and mower for clearing and sanitation, 2 no compressors, water filtering systems, Alum pumps, (alum is presently measured manually), Flocculation, spectronic meter and nesshnessr used for testing colour of water in the laboratory bad.
- e. The water scheme requires more laboratory technologists. Only one is presently available
- f. The water scheme does not have any operational vehicle and equipment for internal communication.

One of the major problems is the 170,000 underground water storage tank which needs desilting and sanitization. Its problem started when the lime dosing equipment parked up and the means of lime dosage become manual, i.e. by pouring the lime power directly in to the clear water storage tank. This mode of lime dosing does not allow for adequate and proper mixing of the chemical before it is dosed. The problem which began about 10 years ago has virtually rendered the storage tank ineffective, the reason being that a greater percentage of it has become silted up.

The level of silt including un dissolved lime is at today about 30% of the storage capacity which is about 51,000 cubic metres. In other words, the silt has taken over $1/3^{rd}$ of the storage capacity. Also, the chemical consumption at the head works has been on the increase for years because more often, the tank is sanitized with HTH to make the water free of germs. At the consumers end, it is common observation that the water contains sediments when pumping is just resuming after power outage or down time.

The solution to the water storage tank lies in taking the following steps:

- a. The use of mud pump to evacuate 51,000 cubic metres of silt and other residues
- b. Lighting of the tank, evacuation and transportation of waste
- c. Uses of stirrers
- d. Sanitization of tank, with 20drums of HTH
- e. Overhauling / replacement of dosing equipments.

Esa Odo Water Works

Most of the equipments in the water works were installed in 1977, and have not been replaced since. The equipments in the water works generally need to be overhauled. The Low lift intake pumps are in use, but covered with mud and water hyacinth. This needs to be cleared off to enhance intake efficiency. Only one of the six High lift pumps is functional. The electrical lighting points of the lift point and the clarifier of the water works are not functional and need to be replaced.

The service lines of the water works has burst pipes in Ibokun, Ipetu Ile and Esa oke, preventing pumped water from reaching desired consumers. The following causes of inefficient performances by of Esa Odo water scheme, based on our assessment visit:

- a. The problem of water hyacinth on the dam. The hyacinth needs to be cleared.
- b. Blockage of the Low lift pump by mud which hinders the operation of the pump.
- c. The lighting point of the high lift point is bad. Needs replacement for it to function.
- *d.* Burst pipes in Ibokun, Ipetu IIe and Esa oke. This stops the water pumped from reaching desired consumers.
- e. Electricity problem. When there's no electricity, the water is not pumped. High cost of running generator on Diesel. Present generator uses about 45litres of diesel per hour.
- *f.* Incessant damage and blockage of pipes due to road construction by some local govt. This cuts off flow if water from reaching targeted consumers.
- g. Need to replace equipments and machines. Equipments productivity level very low. They have not been replaced since they were installed in 1977. Equipments and machines need overhauling.
- h. Bad gauging system and the thermometer. Volume of water being generated and distributed is not known.
- *i. Rising mill low. It needs to be increases to a higher capacity.*
- *j.* Vandalization of pipes, eg, at Imesi Ile due to road construction.

Other findings through physical observation are the following:

- a. There's need to increase the general environmental cleanliness and neatness of the water works environment. The environment was found to be bushy.
- b. The laboratory is very poorly and insufficiently equipped.
- c. The furniture and fittings needs refurbishment/renovation
- d. The water work needs a facelift.

- e. The Esa Odo water scheme can perform better through
 - *Replacement of the generator with a new, low fuel consumption standby generator.*
 - *Replacement of old equipments with new ones.*
 - *Repairs and replacement of burst pipes.*

Ilesa water works

This treatment plant, installed in 1952, is operating at a zero level because it is not being feed with raw water supply. The source of its raw water is located in Efon-Alaaye, Ekiti State about 45km from the treatment plant located in Ilesa town., but the treatment plant has been cut off from this source because several bursts in the service pipes between the raw water source in Efon Alaye and the treatment plant in Ilesa. The treatment plant is therefore not able to meet the increasing demand of the residents of Ilesa for portable water.

Ile-Ife booster station

This is a distribution station that receives water supply from Ede Water Head works, and distributes to Ile Ife residents. The performance of this water works is dependent on the volume of water it receives from the Ede Head works, which again is depend on the availability of electricity to pump supplied water. The frequent power out ages therefore affects the capacity of the water scheme to distribute water. We learnt for instance that in June 2008, only ten hours of electricity was available to pump water in the booster station.

Also, like most of the other water schemes, there is a need to rehabilitate the equipments and replace those that have already broken down. Only one of the water pumps is working, while the stand by Generator is not functioning. However, the quantity of water being produced is not known because of bulk water meters are not installed.

Iwo water scheme was established in 1953, and rehabilitated last in 1998. Its operational problems include:

- a. Lack of diesel to fuel the stand by generator
- b. The high lifts and low lifts, water filter median, filter bed, and Air blower are

all faulty.

We visited **Eko Ende water works** which was established in 1973 on August 7, 2008. Its operational problems are similar to others:

- a. Lack of diesel to power generator. The Generator uses 80litres of diesel per hour. Any time there is no electricity supply; water is not supplied to consumers.
- b. When there's no light, there's no pumping of water.
- c. The high lift Pump. Not used, water filter bed, septic tank , Alum Dosing pumps, and the laboratory all need to be refurbished or repaired as the case may be.

Ila Orangun water works was established in 1967, and last rehabilitated in 1997. Its operational problems are:

- a. The stand by Generator needs to be serviced. The OSWC supplies diesel to fuel it, and no quantity of diesel have been supplied this year for this purpose.
- b. 3 no out of the 4no high lift pumps, are faulty.
- c. The Soda and Alum dosing point is not functioning.
- *d.* There is operational vehicle in the water works, which are located outskirts of the town.
- e. Several cases of burst pipe due to road construction works by the Local Governments

To solve the problems of this and in fact most of the other water schemes, there is a need to develop alternate source of power, carry out extensive repairs and maintenance of equipments and facilities

Table 17: Challenges of OSWC water works

S/No	Name of Scheme	Year of Construction/Comm issioning	Installed Capacity cu.m/day	Current Operating Capacity cu.m/day	Constraints	Solutions	Remarks
1	New Ede Head Works	Completed and has been in operation since 1998	180,000	61,000- 30%	-Head works is due for total refurbishment - Inadequate reticulation system	 -Immediate replacement of the various pumps sets for all groups both at the low lift and high lift stations. Replacement of chemical dosing pump sets and chemical hoses -Rehabilitation of all the treatment facilities i.e. Aerator, Clarifiers, filters and clear water tanks. Purchase of 1No.1.5MVA generator, 1No 840KVA generator Overhauling of all other ancillary plants and equipment. Extension of work to newly developed areas within the coverage of the scheme 	Slated for Federal Government intervention.
2	Old Ede	Under Rehabilitation	9,000	0%		Replacement of the existing rising	Phase II works

	Head works					mains with ductile iron pipes, construction of ground reservoir, trunk mains and reticulation system. All these form the Phase II of the project	yet to be attended. Scheme can only be functional after completion of phase II
3	Eko-Ende Water works	Completed and has been in operation since 1973	9,080	3,500- 30%	-Power supply to the scheme is very unreliable -Distribution system is bad and inadequate	 -Immediate repair of the third high lift pump set at the scheme. - The distribution system to be overhauled by replacing the aged pipes and extension to newly developed areas 	
4	Oyan Water works	Completed and has been operation since 1960	230	65 -30%	- Head works is due for rehabilitation - Inadequate distribution system	 -Upgrading of the scheme to full treatment works by completing the on-going construction of treatment plant -All defective equipment to be repaired/replaced -Connection of the schemes to PHCN supply thus removing the dependency on generating set 	

5	lla-Orangun Water works	Completed and has been in operation since 1961	1,080	600	-Inadequate distribution system	Distribution network to be improved upon	
6	Igbajo Water works	Completed and has been in operation since 1998	1ML/D	2600- 30%	-Inadequate distribution system	The distribution network needs to be expanded by extension of pipe to newly developed areas.	
7	Esa-Odo Water works	Completed and has been in operation since 1977	2.0ML/D	1200- 25%	-The scheme is due for rehabilitation including desilting of the dam -Distribution system is bad	The dam needs to be desilted as a matter of urgency. - The treatment facilities need to be completely overhauled by replacement of the filter media, decanting troughs, valves, dosing pumps etc. The distribution network needs to be expanded	
8	Ilesa Water works	Completed in 1952 and not in operation due to aged raw water line	0.8ML/D	0%	-Incessant pipe bursts in the raw water line -Distribution system is very old	A new scheme is already under construction to provide adequate potable water to Ilesa and its environ under Federal Government water supply intervention. The State Govt. is already constructing a mini scheme to feed part of the town	Scheme already grounded and not functional. The intake station at Efon- Alaye is no longer functioning. Already abandoned

							due to aged raw water pipe and state of disrepair.
9	Erin-Ijesa Water Scheme	N/A	N/A	650-80%	 Scheme need to be upgraded to a full treatment package Require pipeline extension 	Provision of treatment plant, chemical dosing pumps and chlorinator as well as extension of distribution pipelines	
10	Ikeji –Ile Waterworks	Completed and has been in operation since 1967	N/A	600- 30%	-Inadequate distribution system - Incessant burst on the AC rising main	The Federal Government has already awarded the contract for the replacement of pipes prone to incessant burst along the rising main	Scheme requires expansion to be able to supply adequate volume of water to Ipetu- ljesa
11	lfewara Waterworks	Completed and has been in operation since 1960	113,500L/ D	40%	-Scheme requires pipeline extension -Scheme requires upgrading	Construction of treatment plant, provision of chemical dosing pumps & chlorinator and extension of pipelines to new areas for the upgrading of the new water works	State Govt. already constructing a mini scheme

12	Mokuro Water works	Completed and has been in operation since 1938	N/A	1,250-80%	-Scheme requires upgrading -old pipeline	Construction of treatment plant, provision of chemical dosing equipment and replacement of old pipe lines for the upgrading of the scheme	Gravity fed system
13	lfetedo Water works	Completed and has been in operation since 1998	2.0 ML/D	1000 -50%	-Scheme requires pipeline extension - Scheme requires upgrading	 -Construction of New low lift station with new pumps of higher ratings - Construction of treatment plant & provision of chemical dosing pumps and chlorinator. -Extension of distribution pipe network 	
14	Iwo Water works	Completed and has been in operation since 1952	3.81ML/D	30%	-Very bad and inadequate distribution system	Construction of entirely new water scheme to include dam, treatment facilities, low lift & high lift stations, rising and trunk mains as well as distribution net work	

4.3. Assessment of OSWC Commercial structure

- a. The Absence of bulk meters at the various water schemes makes it difficult to control the volume of water being pumped at various stations.
- b. The OSWC does not have an institutionalised mechanism of engaging with their customers, knowing and addressing customer's complaints. There are however several ad hoc arrangements to gather customers opinions.

	High	Low	Remarks				
Customer database		Low	The number of OSWC's connections and customers is				
			not known				
Billing system	stem High Billing system computerised, but bills are						
			determined because of inadequate interaction				
			between the Computer Unit that generates the bill				
			and the Commercial units that distributes the bill.				
Customer service		Low	There is no customer unit to attend to complaints				
			and service issues.				
Tariffs	Poor No standard formula determining tariffs. Tarif						
			fixed by a Government Committee. Tariffs are				
			generally considered low; as they have not been				
			reviewed for the past 11 yearsThe collection rate				
			poor				
Revenue Collection		Poor	OSWC lacks adequate staff for tariff collection. A substantial percentage of the average monthly billing is not collected due to lack of operational logistics and poorly motivated staff.				
			Poor and inefficient revenue collection machinery has resulted in most of expected revenue of the corporation to end up as unpaid bills.				

Table 18: Challenges of OSWC commercial structure

4.4. Assessment of OSWC financial structure

- a. OSWC depends mostly on government for funding of most of its activities especially capital requirements. Thus its responsibility of extending and developing water schemes is lacking. No new water works is been developed and the old ones are not refurbished in order to increase their outputs as a result of lack of funds.
- b. The last audited account of Osun State Water Corporation was as at 31st Dec. 2004.

- c. Deficit of about 80% in operational cost is recorded monthly by the Corporation because of its inability to generate enough revenue to fund its operation and maintenance. The Government offset the deficit through purchase of chemicals, payment of staff salaries and electricity bill.
- d. The corporation does not keep an up to date register of its fixed assets.
- e. We examined the procedure for stock procurement and arrive at the following conclusion:
 - Stock procurement is by tender. This may be by public tender or by selective tender.
 - All purchases are procured at the state tender's board and with the approval of the state governor. Stocks procured include chemical and other water treatment / puritans. The process of procuring chemicals for the corporation by government tender is likely to be influenced by political consideration rather than economic consideration.
 - Stock control, distribution and storage under civil service system is affected by undue bureaucracy resulting in wastages, obsolescence and poor quality control.
 - All chemicals procured are kept at the corporation Central store Ede while distribution is at the request of the various water scheme superintendents.
 - Record of procurement and distribution of stock are kept at the central store while records of disbursement or usage are kept at the various water schemes.
 - We observe that a consignment of chemicals in the store at Eko Ende had gone bad and no longer usable. The consignment which runs into several millions of naira has been in the store for over ten year. This position was reported by the auditor in 2004 and yet the situation remains the same as at the time of our visit.
 - In view of the situation at Eko-Ende, we hasten to accept the current valuation of stock for the purpose of any investment decision. The value must therefore be written down by about 25% to take care of possible obsolescence, deterioration and loss of potency of some of the chemicals in the store.
 - We are also of the opinion that head office hardly pay regular visits to the various water schemes otherwise the said stock in the store at Eko-Ende water scheme must have been evacuated.
 - Stock taking is conducted regularly to determine stock balances. The balances in the book of the corporation in the last four years are as follows:

Table 19 : Stock taking of OSWC

	2004	2005	2006	2007
₽				
Closing	88,987,550	97,957,027	67,689,417	72,343,289
stock				

The cost of rehabilitating all the OSWC water schemes from our assessment is estimated below:

Table 20: Cost of rehabilitating OSWC water works

	Total	15.960billion
11.	Improvement of Ikeji Ile Water Works	0.650billion
10.	Improvement of Eko Ende Water Works	2.770billion
9.	Improvement of Ikire/Apomu Mini Water Scheme	1.00billion
8.	Improvement of Oyan Water Scheme	0.250billion
7.	Construction of New Iwo Water Works	6.00billion
6.	Supply of Pipes and Fittings	0.160billion
5.	Improvement of Ifetedo Water Supply Scheme	0.350billion
4.	Rehabilitation and Expansion-Esa Odo Water Scheme	1.2billion
3.	Desilting of Esa Odo Dam	0.380billion
2.	Rehabilitating of Old Ede Water Scheme	N/A
1.	Rehabilitating of New Ede/Osogbo Water Scheme	3.2billion

Chapter 5: Review of OSWC operations

5.1 OSWC Organisational Review

- a. The present arrangement whereby the Establishment unit is lumped with the Financial and Commercial Units as department does not argue well for proper functioning of all the units because of their differing roles. Presently, there is no department for Personnel, Planning, Research and Statistics
- b. A comprehensive staff appraisal should be carried out for OSWC. This way, the functions and roles of each position in the departments can be mapped to the number, qualifications and experience of staff required.
- c. A training needs assessment should be carried out for staff of OSWC and this should be instituted in order to develop workable capacity development programme for each cadre of staff. While it is desirable for staff to go for structured programmes that leads to higher academic qualifications, this may not be necessary for most of the staff as it has its own disadvantages.
- d. It is highly recommended that on the job training, exchange programmes with well performing water utilities in the country, study tours and short subject specific capacity building courses will be appropriate in other to enhance the capacity of OSWC's staff.
- e. Also, staff of the corporation should be exposed to modern trends in the operation and management of water supply schemes.
- f. Line of communication must be strengthened, particularly between the head office and zonal offices and the various headworks. Functional telecommunication equipment must be provided at all zonal and headwork offices.
- g. There is need to purchase more operational vehicles such as Saloon Cars, pickup Vans and 3Trucks for the Corporation
- h. Most of the staff in the Ilesa water works is presently idle because of the zero level service delivery of the water works; the management should consider the possibility of transferring the non-security personnel to other water works where they can be productive.
- It is obvious that there are inadequate staffs in commercial offices across the State to effectively collect revenue as it affects bill-distribution and cash collection.
- j. There should be staff rationalisation where necessary in order to strengthen zonal offices and Commercial offices that are viable for revenue generation.

5.2 OSWC Technical review

The following measures need to be taken to turn around the technical operations of the water schemes.

- a. Introduction of low cost, economical source of energy to power the plants
- b. Rehabilitation and replacement of equipments
- c. Identification of all burst pipes and effect of repairs.

- d. Detection system should be established to monitor the service and distribution system against vandalisation.
- e. Construction of new water scheme in areas that are not covered by existing service.
- f. Ilesa water works should be connected to a new source of raw water supply
- g. To address the issue of aged plant and equipment, a thorough inventory of the water schemes should be carried out so that the status of the plants and equipment can be determined and recommendations made for their refurbishment or replacement.
- h. OSWC should be in a position to monitor the water levels and amount of water in their reservoirs in order to assist in determining the extent to which water can be drawn for treatment.
- i. OSWC must also be able to detect leakages in its transmission and distribution lines. The corporation should also have leak detection equipment. The corporation should have hydrological and hydro-geological equipment for monitoring of water levels
- j. The service and distribution lines of the OSWC in the entire state is characterised by leakages from pipe bursts, some of which were damaged by construction work of Local Government Agencies. There is indeed a great need for a legislation to increase inter government and sectoral coordination among agencies and curtail activities that are inimical to the operations of the OSWC.

5.3. OSWC Commercial Review

- a. Water rates and charges have not been reviewed for the past 11 years, and this has made the current charges uneconomical and unrealistic particularly for Commercial and Industrial consumers. For instance, under the present charges, Banks are being charged a mere N100 per cu. m
- b. The OSWC should review its present tariff, and establish and implement levels of tariffs and service charges sufficient to meet operation and maintenance costs.
- c. Tariff rate of the corporation should be more economic and competitive with what operate in the neighbouring states in view of the high operational cost of producing water without loosing focus on the affordability of the rate by the customers.
- d. All water consumers in the state should be identified
- e. All water customers should be enumerated and mapped.
- f. There must be proper enumeration of the existing standpipes in the state and how functional they are.
- g. Bulk meters must be installed at the water schemes to determine the volume of water being pumped at the various water stations.
- h. Domestic meters must be installed in all houses and premises being serviced by the water corporation
- i. A timely and effective complaint process needs to be established
- j. OSWC should conduct a Water and Poverty Mapping to determine poor households within Urban and small towns that need to be targeted with subsidies and social connections.

- k. The OSWC should fully computerised its billing system and ensure that Bills are generated based on submissions from the commercial offices. There is a need to constitute a standing procurement Committee made of appropriate representatives. Clear procedures for procurement should also be spelt out and periodic stocktaking should be made a policy.
- Billing and collection activities are still rudimentary with most of the work done manually. This system compromises transparency and accountability. Efficient collection of revenue is necessary and this will go along a way to assist the corporation to meet its O & M needs.
- m. There appears to be no close monitoring of debtors between the commercial and account department and the huge debt burden of the corporation is a sad reflection on its debt collecting effort. The present billing system of the corporation should therefore be critically examined in the light of the following circumstances.
- n. There should be better coordination between the commercial unit and account department in order to keep good record of debtors. This position was also emphasized in the auditor's report.
- o. Bills should be based on usage of water rather than on flat rate. This will mean installing meters in customer's premises to determine their rate of water consumption.
- p. Metering of premises is likely to increase customer's awareness, create sense of ownership and prevent undue wastage of water which often arise from unreported burst pipes and leakages.
- q. Outstanding / unpaid bills by commercial or industrial customers should be negotiated for settlement.
- r. Issuing of bills should no longer be done automatically but based on monthly returns by the field officers as to the premises actually serviced by the corporation.
- s. Domestic customers should be classified into rural and urban customers while those in the cities can also be classified into low, medium and high density customers with differing tariff rates.
- t. Statement of account, tracers and demand notices should be sent to customers on regular basis to remind them of their outstanding bills.

5.4. OSWC Financial review

The sum of N27.Ib has to be expended to rehabilitate and expand the operations of the OSWC over the next five years in order to increase access to water by citizens of the state in the context of the Millennium Development Goals.

- a. The population of Osun state according to 2006 census was 3,423,525 with a projected increase at 2.99% or 3% per annum
- b. Projected access to water as per Osun state water and sanitation reform policy 2008 is about 4 % per annum.
- c. Projected investment cost on water as per our projected expansion plan is N15.960 billion or inflation adjusted cost of N27.113 billion.
- d. As, projected, the financial investment cost per person being served with water will cost an average of N3, 000 per annum.

	2009	2010	2011	2012	2013
Projected State Population At 3% increase per	3,740,979	3,853,209	3,968,806	4,087,871	4,210,508
annum Projected % access to water	43%	45%	48%	52%	57%
Projected population assess to	1,608,621	1,733,944	1,905,027	2,125,693	399,990
Total amount projected as investment on water	4,444,314,582	4,888,746,040	5,377,620,645	5,915,382,710	6,920,982
Projected investment cost per person served with water	2763	2820	2823	2783	2712

Table 21 : Costing the MDG target for water supply MDG in Osun State

5.5 Stakeholders Impact Assessment

The opinion of water consumers was surveyed on some of the issues discussed in this study, and the findings from the study:

- a. A total of 88 consumers were surveyed within 16 Local government areas (LGA) where the Osun state water Corporation renders its services. 28 or 31% of respondents have access to water supplied by the OSWC8 persons or 9% of the respondents say the water supply is regular, 20 persons or 22% said it is periodic.
- b. 28 or 31% have access to water supplied by the OSWC
- c. 8 persons or 9% of the respondents say the water supply is regular, 20 persons or 22% said it is periodic.
- d. The highest number of consumers-18 persons or 22 % said their average monthly water bill is less than N500

- e. Majority of respondents- 18 persons or 20% prefer their water connections to be metered.
- f. Government Interference and lack of technical manpower are the two key problems identified by consumers as being responsible for the poor service delivery of the OSWC
- g. Also provision of funds and increase technical manpower are listed by majority of the water consumers as steps to be taken to increase OSWC operational efficiency.
- *h.* 59 respondents or 67% of the respondents support PSP in water service delivery
- *i.* 54 respondents representing 61% of persons intervened believed PSP will lead to improve access to water and sanitation service
- j. Most of the respondents (30 or 34%) attribute irregular supply of water as the greatest water related problem they are facing; and an equal number of people (25) believe this problem can be solved by efficient public management of public utilities and the same number of persons (25) believes it can be solved through PSPs
- k. The highest number of consumers-18 persons or 22 % said their average monthly water bill is less than N500. Majority of respondents- 18 persons or 20% prefer their water connections to be metered
- *I.* Government Interference and lack of technical manpower are the two key problems identified by consumers as being responsible for the poor service delivery of the OSWC. Other problems identified are:
 - *i.* Inadequate funding
 - *ii.* Ageing infrastructure due to lack of maintenance
 - *iii.* Unstable/inconsistence government policy
 - *iv.* Inconsistence in service delivery, Erratic power supply
 - v. Lack of maintenance culture
 - vi. Tradition & Culture: People see water as a social service
 - vii. Lack of incentive to staff.
- *m.* Also provision of funds and increase technical manpower are listed by majority of the water consumers as steps to be taken to increase OSWC operational efficiency.
- n. 59 respondents or 67% of the respondents support PSP in water service delivery. 54 respondents representing 61% of persons intervened believed PSP will lead to improve access to water and sanitation services.

o. Most of the respondents (30 or 34%) attribute irregular supply of water as the greatest water related problem they are facing; and an equal number of people (25) believe this problem can be solved by efficient public management of public utilities and the same number of persons (25) believes it can be solved through Peps.

The opinion of OSWC staff was also surveyed on some of the issues discussed in this Study, A total of 13 Technical/Engineering of the Osun state water Corporation (OSWC) in 5 water works zonal/area offices were given questionnaires, and requested to respond to 14 questions. and the feedbacks are outlined below

- a. The two most important challenges facing the OSWC according to the staff are erratic power supply, and finances to repairs of old equipment. 53% say it is the former, while 46% say it is the latter.
- b. 69% of the respondents believe the OSWC could improve its revenue collection through efficient service and regular revenue collection; while 30% of respondents believe the institution of a task force on revenue collection would help
- c. All the respondents (100%) said the way overall performance of the OSWC will be improved though one means- adequate maintenance and repairs at the water works.
- d. 38% of the staff believes that the introduction of PSP will increase better service delivery, and 69% believe otherwise. When asked how the private sector can contribute, 46% of respondents mentioned construction of new dams.
- e. For those opposed to the PSP, about 46% of respondents, they proposed provision of enough tools and equipment for work as the alternative to the introduction of PSP/ and restructuring the OSWC
 - *i.* High rate of bursts left un-repaired or replaced over the years.
 - *ii.* Lack of legislative enactment to punish pipeline vandalisations.
 - *iii.* Political interference in OSWC.
 - iv. Lack of operational vehicles
 - v. Bureaucratic nature of the civil service hinders the performance of a service providing agency.
- f. 69% of the respondents believe the OSWC could improve its revenue collection through efficient service and regular revenue collection; while 30% of respondents believe the institution of a task force on revenue collection would help
- g. All the respondents (100%) said the way overall performance of the OSWC will be improved though one means- adequate maintenance and repairs at the water works. Other practicable solutions to the problems of the OSWC are listed as:

- i. Stable policy
- ii. Adequate funding of water and sanitation to resuscitating the existing water scheme;
- iii. Encourage private public participation
- iv. Get alternative power supply
- v. Training and re-training (Capacity building of staff); Have regular billing system.
- vi. OSWC autonomy, it will perform better. If corporation can hire and fire its staff without any political interference, it will instil more discipline and commitment to work and enhance service delivery.
- vii. The corporation should have its own salary structure. This will make it more efficient as more focused in service delivery.
- viii. The equipments should be replaced. Vehicles should be provided to enhance the work.
- ix. Minimise Corruption is an issue.
- x. Better coordination and cooperation between OSWC and Ministry of works, especially on areas where there are water pipes during road construction.
- h. 38% of the staff believes that the introduction of PSP will increase better service delivery, and 69% believe otherwise. When asked how the private sector can contribute, 46% of respondents mentioned construction of new dams. Other areas mentioned are: Investment: Private sector can invest in equipments, materials and the provision of alternative power supply. Community participation: participation in funding, planning, Implementation of policies, monitoring and evaluation, policy development.
- *i.* For those opposed to the PSP, about 46% of respondents, they proposed provision of enough tools and equipment

Key informant interviews

The summary of comments from these interviews is outlined below:

- a. All the pumps and equipments of the OSWC are old. They have not been replaced since they were installed under the old Oyo state water corporation.
- b. Over the years, the pipelines have bursts and have mostly been left unrepaired or replaced. Some recent bursts have happened in Iwo, Ila Orangun and Obokun. Theses bursts were caused by the Ministry of works during road construction. And there have been no repairs. Unfortunately, there's very little the OWSC can do about this because there's no coordination between both Government agencies.
- c. There's no disciplinary action that can be taken against those who vandalized OSWC pipes because the OSWC is not legally empowered to do so.

- d. Political interference from government is a major problem. The corporation is part of the civil service, so its staff has to abide with its bureaucracies, whereas the OSWC is supposed to perform as a service providing agency.
- e. Epileptic electricity supply adversely affects water generation. F there is stable power supply, up to 50% of the water schemes capacity will be utilized.
- f. Inadequate operational vehicles

On how can the OSWC perform better, our key informants gave the following responses:

- a. If OSWC gains full autonomy, it will perform better. If corporation can hire and fire its staff without any political interference, it will instil more discipline and commitment to work and enhance service delivery.
- b. The corporation should have its own salary structure. This will make it more efficient and more focused in service delivery.
- c. Malfunctioning equipments should be replaced.
- d. Adequate vehicles should be provided to enhance the work.
- e. Strategies to reduce Corruption should be implemented.
- f. There should be more coordination and cooperation between the OSWC and the Ministry of Works, to avoid damages to pipelines during road construction.

A sensitisation workshop was organised to generate Stakeholders views on the restructuring plans for the OSWC. Workshop participants said the major problems of OSWC in providing efficient service delivery are:

- a. Funding problem
- b. Ageing infrastructure due to lack of maintenance
- c. Unstable/inconsistence government policy
- d. Inconsistence in service delivery
- e. Erratic power supply

According to the participants, these problems are caused by the following factors:

- a. No stable WSS government policy in place.
- b. Lack of maintenance culture
- c. No private public privatization
- d. Lack of incentive to staff.

The participants proffered the following solutions to the listed problems above:

- a. Stable WSS policy
- *b.* Adequate funding of water and sanitation to resuscitating the existing water scheme.
- c. Encourage private public participation.
- d. Get alternative power supply.
- e. Training and re-training (Capacity building of staff)
- f. Have regular billing system.

On areas the private sector can come in, the following were mentioned:

- a. Investment: Private sector can invest in equipments, materials and the provision of alternative power supply.
- *b.* Community participation: participation in funding, planning, and implementation of policies
- c. Monitoring and Evaluation
- d. Policy development.

On how the OSWC can be re-organized to allow the participation of: the private sector, the civil societies, the consumers, and other stakeholders, the following points were canvassed:

- a. Management of operations: partnership with private sector in product production and distribution.
- b. Finance/funding participation.
- c. Organization of orientation workshops by civil societies.
- d. Sensitization of the communities
- e. Involvement of representative of communities in the board's management
- f. Provision of customer care department
- g. Rights and roles of the community must be known

Chapter 6: OSWC Restructuring

6.1 Organisational restructuring

- 1. The OSWC should be transformed from *a public utility* to *a corporatized water utility*.
- 2. A new company to be known as **Osun State Water Company** should replaced the OSWC
- 3. The provision in the OSWC draft law for a 16 member Board makes the Board unwieldy and a big drain on the OSWC resources. The Board of the new Osun state Water Company should have eight members
 - a. A Chairman to serve on a part time basis
 - b. The Managing Director to serve as the Board Secretary
 - c. The Director in charge of Urban Water Supply in the Ministry of Water Resources and Rural Development.
 - d. An Engineer or water professional nominated either by the Osun State Chambers of Commerce, Industry, Mines and Agriculture.
 - e. A representative of the Trade Union overseeing the OSWC staff, to represent workers interest.
 - *f.* Three other persons nominated on geopolitical basis to represent Water Consumers Associations in Osun State.

The Chairman and other members of the Board shall be appointed by the State Governor.

- 4. The designation of the Chief Executive Officer of the **Osun State Water Company** should be **Managing Director**, and his appointment should be advertised and the person should be appointed on a five year performance contract through a competitive process.
- 5. The new **Osun State Water Company** should have following five departments to replace the existing three departments of the OSWC:
 - a. Administration
 - b. Finance and Account
 - c. Technical Operations and Production
 - d. Commercial Services
 - e. Planning, Research and Statistics

- 6. A Purchasing unit should be established in the Finance and Accounts Department, a Customer Service Centre should be established in the Commercial Department, and a Training Unit should be established in the Administration department.
- 7. Five General Managers should be appointed to assist the Managing Director of the new **Osun State Water Company** in the discharge of his duties:
 - a. General Manager in charge of Administration
 - b. General Manager in charge of Finance and Account
 - c. General Manager in charge of Technical Operations
 - d. General Manager in charge of Commercial Operations
 - e. General Manager in charge of Planning
- 8. The Osun State House of Assembly should amend the draft OSWC law to accommodate this recommendation and the State Ministry of Justice should ensure the registration of the **Osun State Water Company** which solves the problem of political interference and ensures increased autonomy for the OSWC.
- 9. The new Osun State Water Company would determine its staffing needs, and conditions of service not subject to the State Civil Service rules. All positions in the new Osun State Water Company should be advertised and filled from either staff from the existing OSWC, or suitably qualified members of the public. Present staff of the OSWC that cannot fit into the new Osun State Water Company should have the services transferred to the Osun State Civil Service.
- 10. The new **Osun State Water Company** should enter into Public –Public-Partnerships with Lagos Water Corporation Training School, Kaduna State Water Board Training School for the training and retraining of its staff.
- 11. The new **Osun State Water Company** should enter into Public –Public-Partnerships with well performing Water Utilities in Africa such as Ugandan National Water and Sewerage Corporation (NWSC),Rand Water, South Africa, Kaduna State Water Board for study and exchange programmes for its staff.
- 12. The new **Osun State Water Company** should sponsor its staff for training programmes in urban water supply and management issues in nationally and internationally recognised institutions such as the National Water Resource Institute Kaduna, and the Loughborough University in United Kingdom.
- 13. Government should have a steady working arrangement with Power Holding Company of Nigeria to regularly maintain existing power line to all water works.
- 14. The new **Osun State Water Company** should establish a **Customer Service Centre** in its Head office and Zonal offices to:
 - a. Receive and pursue complaints from consumers regarding :
 - *i.* Quality of water

- *ii. Meter reading*
- iii. Billing and Water connection charges
- *iv.* Service interruption and connection fees
- v. Major repairs, connections service interruption
- vi. Water leakages
- vii. Damage to properties of the Water company
- viii. Standards of service; and
- ix. Other related matters
- b. To settle disputes and protect the interests of all consumers
- c. To monitor all matters appearing to the Centre to affect the interests of customers or potential customers.
- d. To consult with any private operator about matters which affect the interest of customers or potential customers to that operator.
- e. To make representation where appropriate on behalf of a customer of complainant to any Private Sector Operator
- f. To provide a channel for information exchange with customers on the water company's roles and services.
- g. Inform the consumers about their right and obligations
- h. Respond to the complaints and /or queries of any cusumer relating to the tariff system

6.2 Commercial restructuring

6.2.1 Efficient Billing system

- 1. The present water tariff of the OSWC was fixed in January 1997, and has not been reviewed since. Obviously this needs to be reviewed in line with inflationary trends and economic realities.
- 2. The present water tariff of the OSWC is presently considered too low and the management of the Osun State Water Company should after necessary public consultation increase its water tariff by 50%¹⁵ for domestic consumers living in Bungalows, community stand pipes and Government owned primary schools, while it should be increased by 100% for other categories of users¹⁶
- 3. The management of the **Osun State Water Company** should appoint a consultancy firm to:
 - a. Enumerate all household water connections in the state and affix tags on the premises of such households.
 - b. Enumerate all stand pipes in the state and through Global Positioning System generate maps on the locations of such stand pipes.
 - c. Enumerate all metered connections in the state and affix tags on the premises of such metered connections

¹⁵ This study has determined the Unit cost of water production by the OSWC to be N13:1 per cubic metre.

¹⁶ This study has determined the Unit cost of water production by the OSWC to be N13:1 per cubic metre.

- d. Enumerate all commercial and industrial water users in the state.
- e. Conduct a water supply poverty mapping of Osun state, determining affordability and willingness to pay in the process.
- f. Determine the no of functional stand pipes in all communities within each Local Government within the State.
- 4. The Computer Unit of the Osun State Water Company should be saddled with the tasks of bill generation, through the following measures:
 - a. Updating credit posting on payment
 - b. Accommodation new consumers into the system
 - c. Adjustments to consumers file
 - *d.* Categories of customers to different billing regimes with a view to adopting monthly billing for areas connected on rising main
- 5. Thirty firms drawn from the Water Consumer Associations or the private sector should be appointed (based on performance contracts) for each of the 46 no commercial offices to distribute water bills and enforce payment of water tariffs by water consumers.
- 6. All water tariffs should henceforth be paid directly into designated banks by water consumers.
- 7. The 46 WCAs/private firms appointed to distribute water tariffs will be paid not more than 20% commissions of revenues derived from tariffs collected through the Banks in each of the commercial offices.
- 8. Private firms should be appointed (based on service contracts) for each of the 30 no commercial offices to distribute water development levy bills of N1,500 and enforce payment of such by water consumers, companies, contractors, and institutions.

6.2.2. **Revenue collection system**

In order to have an efficient billing system, the following things must be done:-

- 1. Bills raised must be computerized and based on service rendered
- **2.** All bills must be serially numbered for effective control and monitoring.
- **3.** Customers must be given individual account numbers and area service numbers for proper identification
- 4. The address and meter numbers of each customer must be stated clearly on their bills.
- 5. Area service address or commercial centre number must be stated on the bills.
- 6. Month of billing must be stated on the bill.
- 7. All bills must have counterfoil copies to serve as receipts to the customers after payment.
- 8. Bills must show customer classifications as domestic, commercial industrial, rural and urban and must be billed according to their status.

- 9. Bills must reflect the rate of billing, previous reading, present reading, total consumption for the month and value charged for the month.
- 10. Bills must depict previous account balance, current charges, amount paid by the customer and net balance outstanding.

6.2.3. Action plan for Constitution of Water Users Association (WUAs)

Until now, consultation of customers by the OSWC has been weak or nonexistent. There is therefore a need to facilitate the constitution of Water Users Association as a platform for OSWC-Water Users engagement. The objectives of the Water Users Associations are:

- a. To establish relationship between the OSWC and communities based on partnership for the sustainable delivery of water supply;
- b. The inclusion/defence of vulnerable and special needs groups in the community such as schools, hospitals, prisons and markets through community management systems;
- c. To promote citizens' participation in water supply, in particular defend the interests of private customers and communities in the OSWC service areas through continuous citizen's participation on service, performance, and future improvements;
- d. To strengthen service-oriented relations between the customers and the OSWC;
- e. To ensure that the OSWC have appropriate knowledge on customers' needs and priorities, improve performance and transparency, and adapt to changing customer preferences; and
- f. To build knowledge and capacity of customers and customers representatives in key water provision issues including budget monitoring and how to identify, expose and report corruption cases.
- g. To carry out sensitization campaigns for water users.

Activities to constitute the (WUAs) include:

- a. Mapping all categories of water users in each of the 30 commercial units through review of secondary data , surveys and field visits.
- b. Public enlightenment on the need to form a WUAs, through Television and Radio Jingles, and Newspaper Advertisements.
- c. Letters of Invitation written and despatched by email and hand delivery to Consumers and Citizens water groups
- d. Radio Announcements in local media to invite participants to each meeting.
- e. Organize a meeting of users in each commercial district in Osun State to inform them of the need to constitute a WUA in their communities to promote demand driven approaches
- *f.* Inaugurate WUAs and elect their representatives at various levels when it has become evident that a considerable number of water consumers are willing to join the project

Expected Output

The expected outputs of the Water Users Associations are:

a. The OSWC addresses customers concern and preferences through participatory

approaches leading to satisfaction in service delivery.

- b. Prompt and improved payments of bills by customers leading to increased revenue for the OSWC
- c. Open and sustainable channel of communication between the customers and the OSWC and vice-versa.

The Water Users Associations are also expected to perform the following activities to improve service delivery:

- a. Report leakages and broken pipes through the offices
- b. Report illegal connections and monitor the activities of private water vendors involved in illegal connections.
- c. Monitor vandalisation of OSWC pipes during construction of new roads, and alert the OSWC in this regard.
- *d.* Appoint some of its members to act as Bill distribution agents for the OSWC to be paid on 5%-10% commission basis.
- *e.* Monitor water quality and make reports to the OSWC through its Zonal and field offices.

6.2.4. Guidelines for constitution of Water Vendors Associations

It is unlikely in the immediate future that OSWC will succeed in providing adequate and safe water supply to many of the areas currently provided for by water vendors. It is likely therefore that supply of water to many people within the urban poor areas of Osun State will continue to be through the water vendor outlets and therefore OSWC and other institutions need to recognize the role of the water vendors and accordingly work to ensure and support this arm of the water supply sector in the immediate future.

The Water Vendor Associations will provide a platform through which they can address common problems and advocate common interests. As long as these associations remain genuinely representative of the group, meaning that membership is open to anyone practicing the trade, they can play a key role in improving professional practices and the quality of service delivery, promoting technical innovation, and integrating private and public service systems.

The OSWC should support such associations by recognizing their legitimacy and negotiating with them to establish fair conditions for doing business. But they should take care not to confer any sort of exclusive status that would tend to encourage cartel-like, price-fixing business practices. By recognizing and regularizing the activities, roles, and institutional position of independent providers, and by facilitating intermediation, coordination, and partnership between the OSWC and independent providers, the stage is set for better delivery of services to the urban poor. Once they are recognized, water vendors could also work out contractual relations (this could be an improvement on their licensing) with the OSWC that would make it easier for the expansion of their services to match the pace of urban development in the context of

the ongoing reform in the sector. It is in this context, that we developed the following guidelines for promoting the constitution of Water Vendor Associations in Osun State:

Objective

To build a body of Water Vendors comprising Borehole Water Managers, Sachet Water Manufacturers, Water Truck owners/Drivers, and Water hawkers in Urban communities as a platform of addressing customers complaints, building partnership with OSWC and capacity building.

Activities

- a. Identification of commercial and private water vendors operating in the state through desk stop review of secondary data, and field visits.
- b. Public enlightenment on the need to form a WVAs, through Television and Radio Jingles, and Newspaper Advertisements.
- c. Letters of Invitation written and despatched by email and hand delivery to identified water vendors.
- d. Radio Announcements in local media to invite participants to each meeting.
- e. Organize a meeting of users mostly in Urban towns in the State to inform them of the need to constitute a WVAs in their communities to promote demand driven approaches
- f. Inaugurate WVAs and elect their representatives at various levels when it has become evident that a considerable number of water consumers are willing to join the project
- g. Licensing of all water vendors by the OSWC. Suggested Licence fee: N2,000; Monthly charge: N500.
- h. Development of a code of practice for members of the Water vendors Associations governing their methods of operations and supply of water to the public.

Outputs

- a. OSWC recognizes the role of the water vendors in service delivery,, monitors their operations to ensure compliance with water quality standards and non damage to OSWC service lines, and build their capacity for better efficiency.
- b. Water Vendors in the state deliver better services.
- c. Water Consumers receive improved services from water vendors in the state.

6.2.5. OSWC Communication strategy

The OSWC should implement a **Community Education and Enlightenment Programme (CEEP)** to ensure public participation in its activities. This involves:

- a. Organization of quarterly Community Consultation forums in the commercial offices- for the purposes of meeting with all categories of consumers (including domestic, commercial, and industrial) as well as Water Vendors and Plumbers Associaitons to discuss leakage reporting, monitoring against vandalisation, revenue collection, monitoring illegal connections
- *b. Production of Newsletters and distribution to consumers*

- c. Production of weekly Radio and TV programmes on local media
- *d.* Dedicated Telephone lines for reports of leakages and faults, and general customer complaints.
- *e.* Launch of a Web site to announce programmes
- f. Customer Surveys: The OSWC should appoint consultants to conduct bi-annual household surveys in each of the commercial offices to identify the 10 most important customer concerns (e.g. breakdown/repair; water quality issues; pressure; leakage; hours of service; administrative issues; tariff issues; billing issue; utility service orientation; service delivery strategy). Findings of these surveys would be discussed in the Community consultation forums.

6.3. Technical restructuring

- a. **New Ede Heads Works**: The following steps should be taken to improve service delivery in this head works which serves 10 local governments in the state.
 - *i.* Increase the no of working low left pumps at the low left station to 3 in order to have working the entire true as against one working presently.
 - *ii.* Clear the clarifiers and replace any damage trident pipe regularly.
 - *iii.* Repair the defecting filter control mechanisms i.e. the values pneumatic controls, air pipes etc.
 - iv. Repair of all defective alum and lime pumps
 - v. Provide new lime delivery pipe network
 - vi. Provide at least two alum delivery pipe network
 - vii. Repair the two defective transformers.

b. Old Ede H/wks

About N58m had been spent on the reliability of the waterworks, resulting in the installation of new pumps of the low and high lift stations. However, the rising means is in a deplorable state, the head works will therefore be unable to deliver water supply even if presently. There is therefore a need to rehabilitate the rising mains pipe line at a cost of N400m or in the alternative provide a rising mains up to Ede Road junction at Dada Estate in Osogbo at an estimated cost of N15m to enable the Head works deliver water supply to Ido-Osun, offatedo and Dada Estate. The Head works also need to be provided with a Generator set and a Pen set at an estimated cost of about N1.2m

- c. Private firms should be contracted to maintain the OSWC production facilities, and service lines under a service contract, as OSWC presently lacks the technical personnel to undertake this assignment.
- d. The OSWC should also go into partnership with the private sector for set up of Independent Power Plant (IPP) and production of energy to boost productions.

e. The following Performance Indicators and target should be adopted by the OSWC for the purposes of monitoring and evaluating its level of service delivery.

Table 22: OSWC Performance indicators and targets

Objective	Priority	No	Base-	Yr	Yrs 2	Yr 5	
	(HML)			line	1	to 4	
Increase service		SC 1	Total household served by				
coverage			utility				
		SC 2	New towns served (list towns)				
		SC3	Suburbs added to systems (list				
			suburbs)				
		SC 4	Total population served (no)				
Improve level		LS 1	Household serve by house				
of service			connection (no)				
		LS 2	Households served by				
			standpipes (no)				
		LS 3	Number of standpipes (no)				
		LS 4	Unplanned of interruptions to				
			supply (no)				
		LS 5	Average hours service per day				
			(hrs)				
		LS 6	Complaints received related to				
			service levels (no)				
Improve water		Q1	Samples passing				
quality			bacteriological standards (%)				
		Q 2	Samples passing turbidity				
			standards (%)				
		Q 3	Samples passing residual				
			chlorine standards (%)				
Reduce unit		UC 1	Total annual direct operational				
costs note:			costs excluding energy,				
household			chemicals depreciation, and				
include all			financing cost divided by				
households in			average household served				
system plus			over the year.				
non-domestic		UC 2	Total energy costs / divided by				
consumers			volume of water produced				
converted to		UC 3	Total annual cost / average				
household			households served over the				
equivalents			year				

based upon water consumption.			
Price equality	P 1	Domestic metered connections (no)	
	P 2	Non-domestic metered connections (no)	
Improved financial	F 1	Total cash revenue as a percentage total cost	
performance / cost recovery	F 2	Revenue collection performance (cash recover / billing)	
	F 3	Quick ration, i.e., Annual revenue / operation expenditure excluding depreciation and financing costs	
	F 4	Depreciation recovery rate, i.e., revenue less operating cost (excluding depreciation) / depreciation	
Capital investment efficiency	CI 1	Asset management plan completed and updated (yes/no	
Environment	EB1	Estimated water loss per household per day (litres)	

6.4 Financial restructuring of OSWC

6.4.1. Strategic Investment Plan

The strategic investment plan of the corporation is designed to cover the expansion, development and rehabilitation of the various water schemes.

The total cost of rehabilitation all OSWC water schemes is estimated at N15.960 billion and it is envisaged that the expansion programme will cover a period of five years in view of its heavy financial outlay.

The sum of N27.1b have to be massively injected into the OSWC by the Osun State Government in form of subventions over the next five years, after which the Osun State Water Company will be expected to be self sustaining, with powers to draw up its budget, source for finances, award contracts, operate a policy of Sustainable cost recovery of in the minimum operating and maintenance cost, fix tariff with the approval of the proposed Osun State Water Regulatory Board, as well as the powers to

determine non civil service based employee compensation, including salaries and benefits.

Any financial contribution by the Osun State Government after 2012, will be treated as either grants or repayable loans.

Between 2009-2012, the OSWC should have full control over its Internally Generated Revenues; with the approval of its Board, it should utilize 50% of the revenue collected dedicated for its Operation and Maintenance costs, and the remaining 50% reserved for capital projects

It is envisaged that the expansion plan which is presently put at N15.960 billion and projected to cost about N27.113 billion within five years will be financed as follows:-

Table 23: OSWC Investment Plan

	2009	2010	2011	2012	2013	Total
	N	N	N		N	N
Cost of Opr. & Maint. of Existing Facilities	731,380,452	804,518,497	884,970,347	973,467,382		4,465,150,799
Opr. & Maint. of Ext. <u>O</u> f New Water Scheme	<u>261,134,130</u>	<u>287,247,543</u>	<u>315,972,298</u>	<u>347,569,528</u>	<u>382,326,481</u>	1,594,249,98
Total Opr. Cost	972,514,582	1,091,766,040	1,200,942,645	1,321,036,910	1,453,140,602	6,059,400,779
Capital Cost of Ext. of the Water Scheme	3,451,800,000	3,796,980,000	4,176,678,000	4,594,345,000	5,053,780,380	21,073,582,180
Total Cost	4,444,314,582	4,888,746,040	5,377,620,645	5,915,382,710	6,506,920,982	27,112,984,959

Book keeping procedure:

The following book keeping procedure should be adopted by the OSWC-

- a. Individual customers account must be maintained on the computer system.
- b. Checkers must be engaged to check the correctness or otherwise of the Area service official returns forms before the system manager authorizes posting.
- c. All document posted must be initialled by the checkers, data clerk and system manager after posting.
- *d.* Posting of customer account must be done promptly at the computer department to prevent any backlog and miss posting.
- e. Monthly list of debtors must be extracted and copies sent to the account department, commercial department, and various area service officials to monitor their debtors.
- f. Tracers and demand notices must be sent to heavy debtors to serve as reminders.
- g. Statement of account must be generated by the computer department regularly and sent to industrials / commercial customers appropriately.

Guide lines for procurement:-

The following guide lines are being proposed for the corporation

- a. An independent purchasing unit should be established to procure chemicals rather than through tender's board. This will develop necessary expertise of the corporation in buying from the best suppliers, at the best price and at the right quality and quantity.
- b. The purchasing unit should only act at the request of the central store and upon the receipt of purchase requisition order
- c. Invoices should not be paid until it is confirmed that goods have been received into the stored and according to specification order.
- d. The corporation should also enter into agreement on long term supply with reliable suppliers to prevent shortages in supply at any point in time.
- e. The store should be properly ventilated to prevent early deterioration or loss of potency of chemicals.
- *f.* Adequate record of purchases and disbursement of chemicals and other inputs must be kept for easy verification and control.
- g. The store must be adequately secured to prevent pilfering and loss of vital stock to thieves and fraudulent hands
- h. Regular stock take must be carried out at the central store and the mini stores at the workstations to determine stock quality, storage and potency of chemicals being used for water treatment.

6.5 PSP participation in OSWC

- a. The various models of PSP in O&M and management of urban water supply have been discussed under Literature review in chapter two.
- b. Up to the present moment, the only form of PSP involvement in the activities of OSWC is the outsourcing of various tasks to consultants for the conduct of

studies, auditing of the OSWC accounts, and supply of equipments or rehabilitation or construction works.

- c. The Private sector is not involved in Operation or maintenance services of the OSWC.
- d. The present state of the water and sanitation infrastructures of the OSWC is deplorable and will have to be fundamentally improved upon for it to attract significant private sector interest and participation either in form of management contracts, leasing or concessions.
- e. Moreover, the poor financial state of the OSWC, would be enable it to muster required financial capital to finance the cost of Management contracts, which is one of the least form of private sector participation.
- f. However, we have identified a role for the private sector in Billing and Revenue collection, and this has been discussed under Commercial restructuring in this chapter. Private sector firms should be contracted by the OSWC under service contracts to distribute bills and ensure payment of revenues.
- g. The private sector should also have be contracted under service contracts to read the OSWC water metres, but this has to be put on hold until service levels increase within the next five years because the present level of metering of the OSWC connections is very low-about 4%

Chapter 6: Conclusion

This study discovered that the major problems hindering the effective performance of the Agency Include:-

- I. <u>Ageing Equipment: -</u> The equipment in the waterholes such as Pump-sets, Generating –set and other treatment plants and equipment etc. have been seriously over-flogged. They need replacement.
- II. **<u>Funding:</u>** Water supply is capital intensive. The Corporation requires serious financial intervention so as to rejuvenate all the schemes.
- III. <u>Staffing: -</u> The Corporation was grossly understaffed in critical areas. There is need to recruits into these areas.
- IV. <u>Maintenance of spares & Materials:</u>-There is acute shortage of maintenance materials such as pipes, fittings and electo-mechanical spares in the Corporation. There was need for replacement.
- V. <u>Operational Support/vehicles:</u>- The Corporation did not have operational vehicles. It should be noted that the State Government has not allocated or given any vehicle to the Corporation since the State was created in 1991. There is the need to allocate vehicles for the Corporations use.

Almost all these problems are financial in nature, and the capital outlay required to solve the cannot possibly be provided by any other interest groups except the Osun State Government, the primary asset owner of the OSWC, and on whom the onerous responsibility of ensuring its citizens have access to safe and affordable water.

Though the option exits for the Osun State Government to seek external financing for the development of its water infrastructure, it must first be seen to be committed towards using its political will, human resources and financial resources to boost the near comatose level of operations of the water schemes, and this will then serve as an impetus for other development agencies on financing institutions to assist in leveraging funds required to restore the operations of the water works to an optimum capacity.

This study believes that the funding problem faced by the OSWC, is not much of lack of financial resources by the Osun State Government, by non prioritisation of the water sector which has caused a gradual decline of the fortunes of the OSWC.

The fact that this study to review the OSWC and consider ways of restructuring it for better services was made possible through the generous grant support on an International organisation is a sad commentary of the Nigerian political leadership. However, it is also a challenge, in the sense that the findings of the study must inform a burning desire by the State Government to revamp the ailing water utility.

The European Union has graciously supported the state Government to find solutions to its poor water governance, but we must also realise that the European Union will not thereafter administer the sector for better service deliver.

While thanking the EU-WSSSRP for giving us an opportunity to conduct this study, we appeal to the Osun State Government, particularly His Excellency, the Executive Governor, the Ministry of Water Resources and Rural Development, and the Osun State House of Assembly to accept the responsibility of implementing the findings and recommendations of this report.