



Lagos State Water Supply and Sanitation Policy

Final draft

June 2012

Contents

Acronyms.....	3
Tables.....	5
Preface.....	6
Introduction.....	9
Existing Situation.....	15
Need for Policy and Definition of Terms.....	28
Policy Components.....	34
WSS Financing	39
Policy Statements.....	41
Institutional Roles and Responsibilities.....	43

Acronyms

CDA	Community Development Association
CDC	Community Development Councils
CLTS	Community Led Total Sanitation
CBOs	Community Based Organisations
CSOs	Civil Society Organizations
CSR	Corporate Social Responsibility
DFID	Department for International Development
ECOSAN	Ecological Sanitation
ESAs	External Support Agencies
HWST	Household Water Supply Treatment
FGN	Federal Government of Nigeria
FMWR	Federal Ministry of Water Resources
JMP	Joint Monitoring Programme
MDGs	Millennium Development Goals
NAFDAC	National Agency for Food and Drug Administration and Control
NUWSRP	National Urban Water Sector Reform Programme
NESREA	National Environmental Standards and Enforcement Agency
NIS	Nigerian Industrial Standard
NSO	Nigerian Standard Organisation
NGO	Non Governmental Organisation
NWRI	National Water Resources Institute
NSDWQ	Nigerian Standard for Drinking Water Quality
LACSOP	Lagos State Civil Society Partnership
LASG	Lagos State Government
LASEPA	Lagos State Environmental Protection Agency
LASURA	Lagos State Urban Renewal Authority
LASPPPA	Lagos State Physical Planning Permit Authority
LASBCA	Lagos State Building Control Agency
LGA	Local Government Areas
LSWMO	Lagos State Wastewater Management Office
LCDA	Local Council Development Area
LSDQCL	Lagos State Drug Quality Control Laboratory
LWC	Lagos Water Corporation
LWSC	Lagos State Water Corporation
LAWMA	Lagos State Waste Management Authority
MRD	Ministry of Rural Development
PSP	Private Sector Participation
PPP	Public Private Partnership
PUPs	Public Utility Partnerships
PHCN	Power Holding Company of Nigeria
OORBDA	Ogun Osun River Basin Development Authority
IPP	Independent Power Project

RBDA	River Basin Development Authority
RUWASSA	Rural Water Supply and Sanitation Agency
VLOM	Village Level Operations and Maintenance
VIPL	Ventilated Improved Pit Latrine
RWSS	Rural Water Supply and Sanitation
RBDA	River Basin Development Authority
SUBEB	State Universal Basic Education Board
SHA	State House of Assembly
SWAs	State Water Agencies
SSSS	Sustainable Sewage and Sanitation Strategy
UN	United Nations
UNICEF	United Nations Children's Fund
UCC	Utilities Charges Commission
WB	World Bank
WASH	Water, Sanitation and Hygiene
WASHCOM	Water, Sanitation, and Hygiene Committee
WCA	Water Consumer Association
WHO	World Health Organisation
WIMAG	Water Investment Mobilisation and Application Guidelines
WSP	Water Service Provider
WSP	Water Safety Plan
WSS	Water Supply and Sanitation

Tables

Table 1:	Lagos State Population (2006)
Table 2:	Population projection for Lagos State (2006-2015)
Table 3:	Water Demand and Supply in Lagos
Table 4:	Demand Gap Estimates (Short, Medium and Long Term)
Table 5:	Lagos Water Corporation at a glance
Table 6:	Sources of Rural Water Supply
Table 7:	Operational Capacities of Rural Water Facilities
Table 8:	Rural water facilities in Lagos state
Table 9:	Major Public Wastewater Treatment Plants in Lagos State
Table 10:	Cost Sharing for Capital Investment -Water Supply
Table 11:	Cost Sharing for Capital Investment -Sanitation
Table 12:	Cost Sharing for O & M- Water Supply

Preface

The development of this Water Supply and Sanitation policy was facilitated by the Lagos Water Corporation (LWC) in consultation with sectoral stakeholders in Lagos state; and the document forms one of the significant outputs of the water sector reform programme implemented in Lagos state as part of the 2nd National Urban Water Sector Reform Programme (NUWSRP).

The process of developing the Lagos State Water Supply and Sanitation (WSS) policy commenced in April 2010, when the coordinating office of the National Urban Water Sector Reform Programme appointed a Consultant for the exercise. Prior to this, there was no WSS policy in the state. The Consultant reviewed strategy papers and policy guidelines of the Ministries and Agencies working in the state water supply and sanitation sector, and used the data gathered to develop a 1st draft WSS policy.

The Lagos Water Corporation then set up a State Policy Committee to review the 1st draft. The membership of the committee comprised representatives from the Lagos Water Corporation, Ministry of Rural Development, Ministry of Health, Ministry of Education, the Ministry of Women Affairs and Cooperatives, Ministry of Agriculture, Lagos State Wastewater Management office, Ogun-Osun River Basin Development Authority, and Civil Society Organisations.

The State Policy Committee held several meetings and made inputs based on local peculiarities and international best practices. Inputs generated from these meetings were further reflected in the 1st draft which was subsequently presented to an enlarged Stakeholders group for discussion.

A Stakeholders consultation workshop was held on January 10, 2011 with participants from Federal Ministry of Water Resources, Federal Ministry of Finance, Lagos Water Corporation, Lagos State Ministry of Information, Lagos State Ministry of Finance, Lagos State Ministry of Justice, Lagos State Ministry of Rural Development, Lagos State Centre for Rural Development, Lagos State Ministry of Works and Infrastructures, Lagos State Primary Education Board, Lagos State Agricultural Development Agency, the Media and Civil Society Organisations. Several water and sanitation related ministries and agencies who were unable to send representatives forwarded written submissions on issues for policy development.

As a corollary, Civil Society Organisations (CSOs) in Lagos State under the auspices of the Lagos State Civil Society Partnership (LACSOP) also convened another consultation workshop on January 28, 2011 to review the 1st draft and made inputs. The workshop organised with the support of the Department for International Development, was attended by forty six participants representing diverse CSOs. The meeting produced a communiqué.

The 1st draft WSS was subsequently reviewed to incorporate inputs made by stakeholders in the January 10 and 28, 2011 workshop; and this led to the development of what was known as the 2nd draft Lagos State Policy WSS policy .

The Lagos State Policy Committee subsequently held new round of meetings to review the 2nd draft WSS policy to accommodate newer issues. These meetings provided additional data and information which resulted in several revisions of the 2nd draft WSS policy.

A 3rd draft WSS policy which reflected all these changes was thereafter produced and presented to a stakeholder's validation workshop on March 28, 2012.

The workshop was attended by key sectoral actors which included the Lagos State Honourable Commissioner of Environment; National Coordinator, National Urban Water Sector Reform Programme (NUWSRP), Federal Ministry of Water Resources (FMWR); Special Adviser to the Lagos State Governor on Parastatals; Group Managing Director of the Lagos Water Corporation; Chairman, Lagos State Universal Basic Education Board (SUBEB); representatives of the Ministry of Agriculture, Ministry of Justice, and Ministry of Rural Development. The New Towns Development Agency; Economic Planning and Budget office in the Governors office; the UNICEF; members of Community Development Organisations, Non Governmental Organisations, private sector service providers, the media and users of water and sanitation services were also represented.

This final draft is the outcome of deliberations and resolutions of the stakeholder's validation workshop held on March 28, 2012.

The policy contains seven chapters. Chapter One provides background information on Lagos state; Chapter Two focuses on existing policy, legal and institutional arrangements for water supply and sanitation service delivery at the federal levels and in Lagos state; Chapter Three outlines the need for a policy to guide future plans for sectoral development, and defines the major terms used in this document; Chapter Four discusses the components of this policy which includes strategic objectives, targets, service levels and standards, and strategies for achieving the policy objectives; Financing and sustainability issues are discussed in Chapter Five; major policy statements are stated in Chapter Six; while the last chapter outlines roles and responsibilities of bodies and residents in the state for sustainable water supply and sanitation service delivery.

The highlights of the policy are summarised below:

Key Principles

1. Lagos state shall separate the distinct responsibilities of WSS service provision, policy formulation, and regulatory duties among sector bodies in the state.
2. Lagos state government shall be responsible for financing capital investment in the WSS sector.
3. Water is a social good, an economic good, as well as an environmental good.
4. Lagos state recognises the Right to safe water and sanitation services and shall implement policies, programmes and projects to ensure a universal coverage by 2020.
5. The Lagos State Water Regulatory Commission shall develop a formula for setting tariffs by WSS agencies. The LWC shall meter all water supply connections while provisions shall be made for social kiosk/public taps to serve poor and vulnerable groups.
6. Lagos State recognises that Climate change has huge potential impacts on the provision of water supply and sanitation services, and will support measures by sectoral agencies to mitigate as well as adapt to climate changes.

7. The private sector shall be encouraged to participate in service provision and delivery at urban areas through various PSP options like management contracts, service contracts, supply contracts, and consultancies.
8. Water supplies in the state shall be in conformity with the Nigerian Standard for drinking Water quality. The Lagos State Environmental Protection Agency and the Lagos State Drug Quality Control Laboratory shall jointly enforce the Nigerian Standard for Drinking Water Quality.
9. Stakeholders shall be involved in the development of the water supply and sanitation sector through participatory investment.
10. To ensure '*Equity and Inclusion*' decisions in the WSS sector shall accommodate gender needs and interests; WSS governance structures shall reflect all stakeholders particularly women; and services shall be accessible to the disabled, the visually impaired, People living with HIV and AIDS and the physically challenged.
11. The State shall develop a framework for delivery WSS services to slums areas in the state.
12. The State recognises the role of small scale water service providers in delivery of WSS services to blighted areas, and will engage with them to ensure improvement in the quality of service delivery.
13. The state WSS agencies shall implement a Stakeholders engagement policy that ensures service delivery meets customer needs and preferences.

Institutional Issues

14. A sector specific Ministry of Water Resources shall be created in Lagos state.
15. The Rural Water Supply and Sanitation Department in the Ministry of Rural Development should be transformed into a full fledged Rural Water Supply and Sanitation Agency.
16. A new body to be known as the Lagos Water Regulatory Commission shall be created.
17. A Lagos State Steering Committee on Water Supply and Sanitation shall be created to harmonise activities of agencies working in the sector.

Chapter One

Introduction

1.1. History

Lagos state was created on May 27, 1967, and took off administratively in April 11, 1968.

1.2. Political/Administrative Structure

There are three arms of government in the state in line with Nigeria's Presidential system of Government. They are: the Legislature, the Executive, and the Judiciary. Executive powers reside in the Executive Council which comprises of the State Governor (as Chairman) and the Deputy Governor, both elected for tenure of 4 years. The Governor appoints other members of the State Executive Council- the Secretary to the State Government, Commissioners, and Special Advisers, the Head of Service, the Chief of Staff and the Deputy Chief of Staff.

They are also State Ministries, Extra-Ministerial Departments, Bureaus, Parastatals, and Agencies of the State Government (commonly called State Ministries and Development Agencies (MDAs). These are headed by Commissioners, Special Advisers, General Managers, Director-Generals, Executive Secretaries or Directors as the designation may apply. The existing state ministries are:

- *Ministry of Agriculture & Cooperatives*
- *Ministry of Commerce & Industry*
- *Ministry of Science & Technology*
- *Ministry of Justice*
- *Ministry of Economic Planning & Budget*
- *Ministry of Physical Planning & Urban Development*
- *Ministry of Education*
- *Ministry of Rural Development*
- *Ministry of Environment*
- *Ministry of Establishments, Training and Pensions*
- *Ministry of Finance*
- *Ministry of Health*
- *Ministry of Home Affairs & Culture*
- *Ministry of Housing*
- *Ministry of Special Duties*
- *Ministry Tourism & Intergovernmental Relations*
- *Ministry of Transportation*
- *The Ministry of Women Affairs and Poverty Alleviation*
- *Ministry of Youth, Sport & Social Development*

- **Geographical Area** – 3,577sq. km (0.4% of the nation)
 - **Population Estimate** – 16.86m (27.4% of Country Urban/UN)
 - **Population Density** – 4,193 persons/sq.kms
 - **Population Growth Rate** – Between 6-8% (Nigeria 2.9%); 600,000 per year.
 - **Projected Population** – 20.19 (2010) 24.5m (2015)
 - **20 LGAs and 37 LCDA's**
 - **Number of Communities** – 2,600.
- Source : (UN Habitat)

- *Ministry of Waterfront Infrastructure Development*
- *Ministry of Works and Infrastructure*

There are 20 Local Government Areas and 37 Local Government Development Areas in the state. Some of the LGAs incorporate LCDAs. The LGAs are listed below:

1. Agege
2. Ajeromi-Ifelodun
3. Alimosho
4. Amuwo Odofin
5. Apapa
6. Badagry
7. Epe
8. Eti-Osa
9. Ibeju-Lekki
10. Ifako-Ijaiye
11. Ikeja
12. Ikorodu
13. Kosofe
14. Lagos-Island
15. Lagos-Mainland
16. Mushin
17. Ojo
18. Oshodi-Isolo
19. Somolu
20. Surulere

The Legislative power in the state lies with the State House of Assembly (SHA) composed of elected constituency members and assisted by support staff.

The SHA has the Speaker, Deputy Speaker, House Leader, Chief Whip, and House Committee Chairman as key officers. The Legislature has oversight function over the Executive arm, and the 20 Local Government Areas (LGAs) of the State. The SHA is legally empowered to make laws, appropriate public funds for spending by the Executive arm, and monitor public spending to ensure accountability.

The state judiciary headed by a Chief Judge consists of hierarchically arranged courts: State High Courts, Magistrate Courts, and Customary Courts that adjudicate on criminal and civil matters, interprets laws, and provides legal authorization to transactions and documentations. There are also Special Courts, such as Revenue Courts, Sanitation Courts to serve specific purposes. The Judiciary preserves the sanctity of the rule of law by interpreting the laws (where there are conflicts) and settling disputes (thereby ensuring equity and maintaining justice).

1.3. Geography

With a geographical size of 3,577 square kilometres, Lagos, is one of the smallest states in Nigeria, representing 0.4% of the entire geographical area of the country. The state is located on the south-western part of Nigeria on the narrow coastal flood plain of the Bight of Benin, and lies approximately between Longitudes 2o42'E and 3o42'E and Latitudes 6o22N 6o52'.

The southern boundary of the state is formed by the 180km long Atlantic Coastline, while its northern and eastern boundaries are shared with Ogun state. On the western side, the boundary is bordered by the Republic of Benin. The average temperature in Lagos is 27 °C and the annual average rainfall is 1532 mm.

1.4. Ecology

Lagos State has an area of 356,861 hectares, out of which 75,755 hectares are wetlands with the dominant vegetation of tropical swamp forest, comprising fresh waters and mangrove swamp forests. It shares a double rainfall pattern, with two climatic seasons – dry (November-March) and wet (April-October). The drainage system of the State is characterized by a maze of Lagoons and waterways which constitute about 22% or 787 sq. km of the state's total landmass.

1.5. Demography

The state has one of the highest population in the country, though they are no agreed figures on the state's population. While the 2006 National Census Commission puts the population of the state at about 9million, the 2006 Lagos State Social Security Exercise and Population figure puts the state population at 17 million, out of a national estimate of 150 million.

However, the UN Habitat Study and the UNDP assisted State Regional Master Plan estimated Lagos State population in year 2000 at 13.4million and over 15 million inhabitants in 2004. City Mayors, the international think tank on urban affairs ranked Lagos as one of the 7th fastest growing city in the world; and with an average annual growth rate of 4.44%, the population is expected to reach 21.51m by 2020.

A UN study (1999) expected Lagos to hit 24.5million population in year 2015, at which time Lagos will be the third most populous city in the world. This invariably means that Lagos population is growing ten times faster than New York and Los Angeles, with grave implications for urban sustainability

The metropolitan Lagos, with an area of 37% of the land area of Lagos State is home to over 85% of the state population. Population growth rate is about 600,000 per annum with a population density of about 4,193 persons per sq. km. The built up areas of metropolitan Lagos harbours an average density of 20,000 persons per square kilometre.

Table 1: Lagos State Population (2006)

S/No	Local Government Area	Estimates by National Population Commission	Male	Female	Estimates by the Lagos State Government
1	Badagry	241,093	121,232	119,861	380,420
2	Ojo	598,071	310,100	287,971	941,523
3	Amuwo-Odofin	318,166	167,856	150,310	524,971
4	Alimosho	1,277,714	649,460	628,654	2,047,026
5	Agege	459,939	242,520	217,419	1,033,064
6	Ifako-Ijaye	427,878	218,993	208,885	744,323
7	Ikeja	313,196	169,233	143,963	648,720
8	Oshodi-Isolo	621,509	321,767	299,742	1,134,548
9	Mushin	633,009	328,197	394,812	1,321,517
10	Surulere	503,975	261,265	242,710	1,274,362
11	Ajeromi-Ifelodun	684,105	352,238	331,867	1,435,295
12	Apapa	217,362	119,556	97,806	522,384
13	Lagos Island	209,437	108,057	101,380	859,849
14	Lagos Mainland	317,720	166,163	151,557	629,469
15	Shomolu	402,673	207,649	195,024	1,025,123
16	Kosofe	665,393	350,120	315,273	934,614
17	Ikorodu	535,619	272,569	263,050	689,045
18	Eti-Osa	287,785	160,396	127,389	983,515
19	Ibeju/Lekki	117,481	59,544	57,937	99,540
20	Epe	181,409	91,105	90,304	323,634
	Total	9,013,534	4,678,020	4,335,514	17,552,942

Source: National Bureau of Statistics/Lagos State Government

Table 2: Population projection for Lagos State (2006-2015)

Local Government						
S/No	Area	2006	2012	2013	2014	2015
1	Agege	1,033,064	1,302,998	1,354,399	1,407,827	1,463,363
2	Ajeromi/Ifelodun	1,435,295	1,810,330	1,881,744	1,955,975	2,033,134
3	Alimosho	2,047,026	2,581,903	2,683,754	2,789,623	2,899,668
4	Amuwo/Odofin	524,971	662,143	688,263	715,414	743,636
5	Apapa	522,384	658,880	684,872	711,889	739,971
6	Badagry	380,420	479,822	498,750	518,424	538,875
7	Epe	323,634	408,198	424,300	441,038	458,436
8	Eti-Osa	983,515	1,240,502	1,289,438	1,340,303	1,393,176
9	Ibeju-Lekki	99,540	125,549	130,502	135,650	141,001
10	Ifako/Ijaiye	744,323	938,811	975,845	1,014,340	1,054,354
11	Ikeja	648,720	818,227	850,505	884,055	918,930
12	Ikorodu	689,045	869,089	903,373	939,009	976,051
13	Kosofe	934,614	1,178,824	1,225,326	1,273,663	1,323,906
14	Lagos/Island	859,849	1,084,523	1,127,305	1,171,775	1,217,999
15	Lagos/Mainland	629,469	793,946	825,266	857,821	891,660
16	Mushin	1,321,517	1,666,823	1,732,575	1,800,922	1,871,965
17	Ojo	941,523	1,187,538	1,234,384	1,283,078	1,333,693
18	Oshodi/Isolo	1,134,548	1,431,000	1,487,450	1,546,126	1,607,118
19	Shomolu	1,025,123	1,292,982	1,343,988	1,397,006	1,452,115
20	Surulere	1,274,362	1,607,346	1,670,753	1,736,661	1,805,168
	Total	17,552,942	22,139,434	23,012,792	23,920,599	24,864,219

Source: Projection based on United Nation Population estimate with a growth rate of 3.9448

1.6. Culture

Lagos state is essentially a Yoruba speaking. It is cosmopolitan with an admixture of the traditional indigenous inhabitants and pioneer immigrant settlers. It is mainly inhabited by the Awori's and Oguns in the former Ikeja and Badagry divisions, and the Ijebus and Eko-Aworis in the former Ikorodu and Epe divisions. Due to its urban nature, and its status as former Federal capital, it has become a socio cultural melting pot attracting Nigerians and foreigners alike, giving it a cosmopolitan character.

1.7. Geology

Lagos State is basically a sedimentary area located within the western part of Nigeria, a zone of coastal creek and lagoon. The area is also developed by barrier beaches associated with sand deposits. The subsurface geology reveals two basic lithologies: clay and sand deposits. These deposits may be inter-bedded in places with sandy clay or clayed sand and occasionally with vegetable remains and peat. The water bearing strata of Lagos State consist of sand, gravel or admixtures from fine through medium to coarse sand gravel.

Basically, there are four major aquiferous units that are being tapped for the purpose of water supply in the Lagos metropolis. The first aquifer extends from the ground level to roughly 12m below the ground layers of clay and sand. This upper aquifer is of minor importance for large water supply purposes. This aquifer is prone to contamination because of its limited

depth. The second aquifer is encountered between 20 and 100m below sea level and it can be found around Igando axis.

The third aquifer is encountered in the central part of Lagos at the depth ranging from 130-160m below the sea level. The fourth aquifer is located at an elevation of approximately 450m below the sea level. It is separated from the third aquifer by a rather thick layer of shale of the Ewekoro formation. Only few boreholes tap water from this aquifer.

1.8. Water resources

The major water bodies are the Lagos and Lekki Lagoons, and the Yewa and Ogun Rivers.

Chapter Two

Existing Situation

2.1. Existing National Policy framework for Water Supply and Sanitation

The National Water Supply and Sanitation policy, 2000 gives Federal Ministry of Water Resources the responsibility for water supply and sanitation policy formulation, data collection, resources and demand surveys, monitoring, evaluation, studies, research and development.

The Policy also charged River Basin Development Authorities with the responsibility for the establishment and supply of bulk water, while the National Water Resources Institute is responsible for manpower training, research, development and studies.

The Policy also mandates State Water Supply Agencies with the responsibility for service provision, regulatory as well as water quality monitoring at state levels. The states are also expected to provide technical assistance to Local Governments for rural water supply and sanitation services delivery.

Finally, the policy mandates Local Governments to be responsible for establishment, operation and maintenance of rural water supply and sanitation schemes, in conjunction with the benefiting communities.

The Water Supply & Sanitation Interim Strategy Note, was developed by Federal Ministry of Water Resources (FMWR), in November 2000; and it represents a joint vision of World Bank and the Ministry for sector development, and lending strategy for the Bank in the water supply and sanitation sector in four segments, namely, urban, small towns, rural, and water resources management.

A National Water Resources Management Strategy that featured various specialist reports on institutional, legal and regulatory framework, and trans boundary waters was produced in 2001, a National Water Policy in 2004, a Water Resources Management Policy in 2006, and a draft National Irrigation Policy and Strategy for Nigeria was also prepared in 2006.

With the implementation of Water Sector Reform Programme in later years at the Federal and state level, the need to assign regulatory functions to a Water Supply Regulatory body instead of the SWA became an issue of discourse. To address this, the National Urban Water Supply Reform Project, operating under the Department of Water Supply and Quality Control in the Federal Ministry of Water Resources developed a '*Regulatory Handbook for Water Supply Services*' and a '*Model Water Supply Services Regulatory Law*' as guiding documents for the creation of a Regulatory body for WSS at state levels.

In 2005, the National Council on Water Resources (NCWR) recognized the need to urgently establish an acceptable Nigerian Standard for Drinking Water Quality because it was observed that the "*Nigerian Industrial Standard for Potable Water*" developed by Standards Organisation of Nigeria and the "*National Guidelines and Standards for Water Quality in Nigeria*" developed by Federal Ministry of Environment did not receive wide acceptance by all stakeholders in the country.

Since water quality issues are health related issues, Federal Ministry of Health, collaborating with Standards Organisation of Nigeria (the body responsible for developing National Standards in Nigeria) and working through a technical committee of key stakeholders developed the Nigerian Standard for Drinking Water Quality (NSDWQ).

The Nigerian Standard for Drinking Water Quality covers all drinking water except mineral water and packaged water. The standard applies to:

- a. *Drinking water supplied by State Water Agencies,*
- b. *Drinking water supplied by community managed drinking water systems*
- c. *Drinking water supplied by water vendors and water tankers*
- d. *Drinking water used in public or privately owned establishments*
- e. *Drinking water used in food processing by manufacturers*
- f. *Drinking water from privately owned drinking water system and use solely for the family residence*

Mineral water and packaged water are expected to comply with Nigerian Industrial Standards for Natural Mineral Water (NIS 345:2003) and Potable Water (NIS 306:2004) and its production shall be regulated and certified by the National Agency for Food and Drug Administration and Control and Standards Organization of Nigeria respectively. The States Ministries of Health were charged with the responsibility for enforcing the NSDWQ.

Programming for Sanitation is guided primarily by the National Water-Sanitation Policy 2005, the National Environmental Sanitation Policy and a new Strategy for Scaling-Up Rural Sanitation. A new comprehensive National Water and Sanitation Policy is being developed.

Arising from the National Water and Sanitation Policy, all states are expected to develop State Water Policy within the context of their respective peculiarities. Lagos State has now taken up this challenge.

2.2. Existing National Legal framework for Water Supply and Sanitation

Section 20, Chapter 11 of the Constitution of the Federal Republic of Nigeria 1999 provides that: *“The state shall protect and improve the environment, and safe guard the water, air, land, forest and wild life in Nigeria”*. And under the Second schedule, Part 1, item 64 of the same Constitution, the Federal Government of Nigeria has exclusive jurisdiction on primary water matters from sources affecting more than one state as maybe declared by the National Assembly.

Items 29 and 36 all of Part 1, Second schedule of the 1999 Nigerian Constitution also grants exclusive legislative powers to the Federal Government of Nigeria such as fishing in rivers and lakes, maritime shipping and navigation. However, the sourcing, production, supply and distribution of water other than those stated above falls under the Concurrent Legislative list under Part 11 of the 1999 Constitution. Also each federating state is permitted by the Constitution to legislate on water matters as it affects such state.

The Fourth schedule of the Constitution also grants the 774 Local Government Council in the country the power to make laws and administer programmes related to provision and maintenance of public conveniences, sewage and refuse disposal.

Besides the Constitution of the Federal Republic of Nigeria, there are several federal and state laws that regulate the supply and usage on water in Nigeria.

The primary federal law regulating water is the “Water Resources Act 101 of 1993” which in section 1 vests the Federal Government with *‘the right to the use and control of all surface and groundwater and of all water in any water-course affecting more than one State’*. Notwithstanding this provision, the Law in Section 2(i) granted Individuals the right to *“take water without charge for his domestic purpose or for watering his livestock from any water course to which the public has free access”*

A new National Water Resources Bill that is expected to repeal and replace the Water Resources Decree 101 of 1993 is presently being debated by Nigeria’s Federal law makers. The National Water Resource Institute Act provides for the establishment of the Water Resources Training Institute for the promotion, development of training programme and courses on water resources and advise Government on water resources training needs etc. The institute is currently located in Kaduna, Nigeria.

The River Basins Development Authorities Act 1986 establishes and regulates all River Basin Authorities in Nigeria. The Act lists their functions as agriculture, irrigation, fisheries, forestry and development of a Veterinary institute.

The National Agency for Food and Drug Administration and Control Act (NAFDAC) Act grants the NAFDAC, power to regulate the production, distribution and consumption of bottled waters in Nigeria by virtue of the Bottled Water Registration Regulations 1996 LN 18, the Bottled Water Advertisement Regulations 1995 LN 17, and the Bottled Water Labelling Regulations 1996 LN 8. Bottled water includes any water in bottle or cellophane water popularly called *‘pure water’*.

Under Federal Environmental Protection Agency (FEPA) Act 1992, No 59, no federal, state, local Government or any authority can perform any act or duty or functions which may affect the environment without carrying out an Environmental Impact Assessment. The FEPA has also made several regulations to regulate the environment.

The most recent development in the set up of environmental regulatory institutions, however, came about with the creation of National Environmental Standards and Enforcements Agency (NESREA). Established under Act No. 25 of 31 July 2007, NESREA was constituted as a parastatal within the Federal Ministry of Environment.

NESREA is responsible for the protection and development of the environment, biodiversity conservation and sustainable development of Nigeria’s natural resources in general. The agency also concerns itself with environmental technology, coordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulations, rules, laws, policies and guidelines

2.3. Existing National Institutional framework

The Federal ministry of Water Resources (FMWR) was created in 1977 and charged with the responsibility for formulating and coordinating national water policies, management of water resources, , and approving development projects.

The National Water Resources Institute (NWRI) was legally established in 1985 and is responsible to FMWR for engineering research functions related to major water resources projects and training sector professionals and technicians. The River Basin Development Authorities (RBDAs), were created 1986 and saddled with the responsibility for planning and developing water resources, irrigation work and the collection of hydrological, hydro-geological and meteorological data.

Their main involvement in potable water supply has been the provision of water to communities for the purposes of agricultural, domestic, and industrial consumption. In Lagos state for instance, the Lagos Water Corporation (LWC) has an agreement with the Ogun-Osun River Basin Development Authority (OORBDA) for abstraction of water from the Ogun river.

A Utilities Charges Commission (UCC) was established in 1992 to monitor and regulate utility tariffs, including those of State Water Agencies (SWA); however it appears in practice to have not been functional.

In 1988, the Federal Government put together the Federal Environmental Protection Agency (FEPA). This institution metamorphosed into Federal Ministry of Environment in 1999.

The Federal Ministries of Environment and Health also have sector-related mandates in Nigeria. The Federal Ministry of Environment, Housing and Urban Development (FMEH&UD) mandate impacts on the sanitation and water sector in several ways, especially in the areas of environmental sanitation and water pollution (for which it has formulated a National Environmental Sanitation Policy and Policy Guidance on School Sanitation).

The mandate of the Federal Ministry of Health includes standards formulation and regulation of drinking water quality, as well as policy development and control and prevention programmes for water- and sanitation-related diseases through its Public Health department. Other Federal ministries with some involvement in the sector include Education, Women Affairs, Intergovernmental Affairs, Youth Development, Special Duties, and the National Orientation Agency.

The National Task Group on Sanitation is a multi-sectoral group with FMWR as the lead agency. It coordinates water sanitation and hygiene programming as well as policy implementation at Federal level.

At State Government Level in Nigeria, responsibility for potable water supply was traditionally entrusted to departments of the state governments (36 in number). As the importance of drinking water supply grew during the 1970s, most water departments were gradually transformed into SWAs to provide urban, semi-urban and, in some cases, rural water supply. Each SWA has, in general, been established under an edict to develop and manage water supply facilities within its respective state and to meet sound financial objectives. SWAs are responsible to their state governments, generally through a State Ministry of Water Resources (SMWR), though in some cases under alternative arrangements.

In some states, responsibilities for rural water supply remain with or have been transferred back to a state government department; additionally, in several states, state rural water and sanitation agencies have been set up largely to implement the FGN/UNICEF RWSS program.

At Local Government level, all the 774 Local Government Areas (LGAs) are responsible for providing rural water supply and sanitation facilities in their areas, although only a few have adequate resources and relevant skills to address the problem.

In theory, State Environmental Protection Ministries have jurisdiction over water quality, but there is little practical exercise of its mandate.

2.4. Existing Lagos State Policy framework

Before now, Lagos State does not have a Water Supply and Sanitation Policy, but various MDAs in the sector, developed guidelines for administering and managing the sector.

Ministry of Environment generally provides technical leadership in policy formulation, while Ministry of Physical Planning and Urban Development sets guidelines for the provision of WSS services in households, estates, and industrial areas; and the New Towns Development Authority (NTDA) set guidelines for the provision of WSS services in newly built up areas.

2.5. Existing Lagos State Legal framework

The two main laws governing the water supply and sanitation sector in the state are the Lagos State Water Sector Law 2004 and the Environmental Law of Lagos State, 2007.

The Lagos State Water Sector Law 2004, is a sector wide law that covers the activities of the Lagos Water Corporation, and provides for the set up of the Lagos State Regulatory Commission, and the State Water Court. (both are yet to be set up).

The Environmental Law of Lagos State, 2007 entitled: *A Law to provide for the Management, Protection and Sustainable Development of the Environment in Lagos State* is a state wide draft law on the environmental sector comprising three environmental related laws enacted in the past. They are:

- a. *A Law To Provide For The management, Protection and Sustainable Development of the Environment in Lagos State;*
- b. *A Law to Provide for the Enforcement of Standards and Control of Sewage and Drainages and for matters connected therewith; and*
- c. *A Law to Provide for the Establishment And Regulation of Sewage And Wastewater Management In Lagos And For Related Matters'*

2.6. Existing Lagos State Institutional framework

The water supply and sanitation related public institutions in Lagos state are:

- a. *Lagos Water Corporation*
- b. *Wastewater Management office*
- c. *Ministry of Rural Development*
- d. *Ministry of the Environment*
- e. *Ministry of Health*
- f. *Ministry of Women Affairs and Poverty Alleviation*
- g. *Ministry of Agriculture*
- h. *Ministry of Education*
- i. *State Universal Basic Education Board*
- j. *Ministry of Physical Planning & Urban Development*
- k. *Centre for Rural Development*

l. Local Government Development Areas

m. New Towns Development Authority

There are no clear mandates for the bodies as their functions overlap and conflict regarding sectoral policy formulation, service provision and regulatory functions. For instance, the Ministry of Health implements Health, Education and Environmental Sanitation programmes (in supervisory role over the Local Authority Health Units) at rural areas.

The Ministry of Environment on its part is involved in both policy formulation and service provision. The Ministry is generally responsible for initiation, formulation and implementation of policies and coordination of environmental programmes in Lagos State as well as providing technical assistance to other institutions and individuals on all environmental matters. The Ministry of Environment is also involved in the construction of model public toilets and supervises the construction and management of public toilets by the private ownership under the state's Public-Private Partnership initiative scheme.

The Directorate of Rural Development came to being in 1986 with special focus on the provision of basic infrastructural facilities in rural areas. However, by year 1998, the Directorate of Rural Development metamorphosed to a full fledged Ministry with Rural Water and Sanitation as one of its core / functional departments. Rural Water and Sanitation (RUWASSA) Department as the name implies is vested with the responsibility of providing potable water supply and Sanitation in the rural and peri-urban communities of the State

The Ministry of Women Affairs and Poverty Alleviation implements poverty reduction initiatives which include construction of boreholes in public places and market places.

The State Universal Basic Education Programme provides child friendly water and sanitation facilities in schools.

The Ministry of Physical Planning and Urban Development set guidelines for the provision of WSS services in households, estates, and industrial areas.

The New Towns Development Authority (NTDA) also sets guidelines for the provision of WSS services in newly built up areas.

Lagos State Agricultural Development Project is involved in the provision of VIP toilets at various farming communities.

2.7. Urban Water Supply in Lagos State

Lagos Water Corporation (LWC), which is wholly owned by the Lagos State government, operates in 29 zones covering 3,577 square kilometres and a population of 15mn. It is the largest water utility in West Africa.

The LWC currently has an installed water supply capacity of 160 million gallons per day (MGD) (712.9 million litres per day (MLD)), but ageing supply lines, water works and poor public electricity hamper the services of the corporation, hence it is operating at only 48% capacity, or only 36% of water demand. It supplies water mainly to the urban population, but

also to slum areas and some rural communities. It is estimated that only about 4million of the state's 15million population have access to piped water.

The general shortage of water supply is a result of low capacity utilisation which is then met by privately operated tankers, porters and privately owned boreholes and wells. This in turn has its own issues with regards to water purity standards, higher delivery costs and the ultimate impact on the state's water levels from the improper tapping of ground water reserves and wastage in its collection and delivery.

Table 3: Water Demand and Supply in Lagos

Year	Demand (mld)	Supply (mld)	Short Fall (mld)
2000	668.40	267.36	401.04
2003	956.48	430.42	526.06
2007	1405.39	702.69	702.7
2020	3901.16	2925.87	975.29
2025	5347.20	4277.76	1069.44

Source: Lagos Water Corporation, 2010

Table 4: Demand Gap Estimates (Short, Medium and Long Term)

Year	Population	Water Demand		Water Production		Demand Gap	
		mgd	mld	Mgd	Mld	Mgd	mld
2010 to 2013	20,837,250	625	2838	362	1643	263	1195
2014 to 2017	25,327,808	633	2873	622	2823	11	50
2018 to 2020	29,320,103	733	3328	745	3382	12	54

Source: Lagos Water Corporation

Table 5: Lagos Water Corporation at a glance

Staff strength	1,164
Total Installed production capacity	210mgd
Total current operation capacity	About 57.2%-Pre IPP
Annual production volume (m ³)	895m ³
Total water supply coverage	54 LGAs
Total population served	6.68million
No of Standpipes	145
Total household connections	167,989
Active connections	167,707
Per capital consumption (lpcd)	30 gal/cap/day (135 lpcd)
Total annual consumption	895m ³
Average tariff (N/m ³)	N50/m ³
Total water sales	Zonal- N50m, Local Govt, N14.6, State N35m, Group N3.8
Unaccounted for water (%)	40.63%
Sources of water: Surface in %	56.67%
Sources of water: Borehole in %	43.33%
Total annual budget	5billion(2009) i.e Recurrent(3.124b)

No of Ground water facilities	44(Mini/Micro/Works)Aguda,Apo ngbon,Alexander,Isheri-Oke,Iponri(not included yet)
No functional	44
No with full treatment	44
Total installed capacity (m ³ /day)	351,636.36m ³ /day
Current Output (m ³ /day)	179,181.81m ³ /day
No of surface water facilities	4
No functional	3
No with full treatment	3
Total Installed capacity (m ³ /day)	540,909.09m ³ /day
Current Output (m ³ /day)	390,909.09m ³ /day
Daily raw water abstraction	554,545.45m ³ /day
Monthly consumption or sold water volume	51.62m ³
Measurement of the water volumes – by metering	Yes-0.564m ³
Measurement of water volumes – by other means	51.06m ³
Daily Operating hours on PHCN supply	4-12hrs
Daily Operating hours on generator	8hrs
Total Operation and maintenance cost	1.65 billion/ year

2.8. Rural Water Supply in Lagos State

Ministry of Rural Development is the main institution overseeing rural areas with the responsibility of providing potable water supply and sanitation in the rural and peri-urban communities of the state.

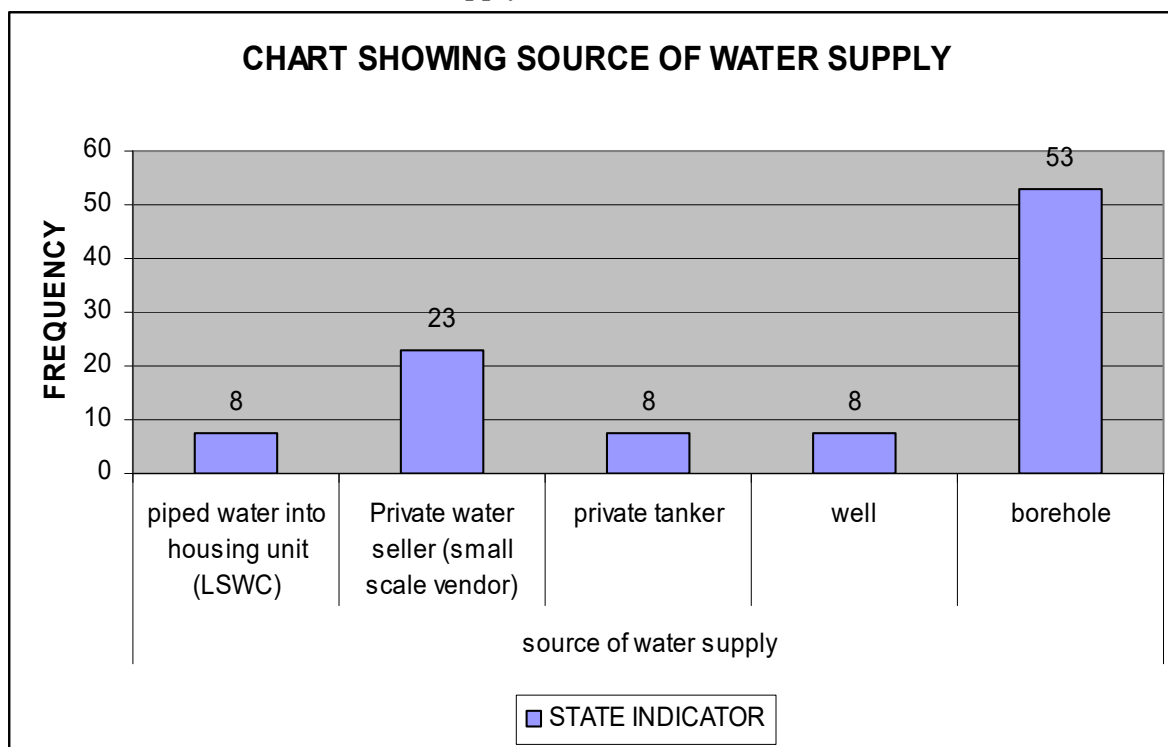
Implementation of rural water and sanitation projects has been faced with various forms of challenges such as:

- i. Financial constraint in terms of budgeting appropriation.*
- ii. Sustenance of project after handing over due to the negligence of the operators on one hand and the host community on the other hand in the design and construction of the project.*
- iii. Location of project by fiat without due consideration to the actual need of a community. (Supply Driven Approach).*
- iv. Conflict of interests within the community in citing projects.*
- v. Inadequacy of equipments to monitor and supervise on-going and completed projects.*
- vi. Lack of baseline survey.*
- vii. Lack of synergy amongst the various tiers of stake holder's i.e Federal, State, Local Government, Private Sector, the benefiting Communities and PHCN.*
- viii. Conflict between Community Development Association and traditional leadership.*

However, a research document- '**Study needs for Rural Water Supply Schemes in Lagos state 2010**' revealed that 53% of the residents of rural areas depend on boreholes for their main source of water supply, 8% patronized LSWC (piped water into their housing unit and piped water to yard or plot). In addition, private water seller (vendedor) accounted for 23% while private tankers and well and borehole were indicated by 8% each.

There are a total of 1705 rural water schemes across the state, out of which 607 (35.6%) were provided by the Ministry of Rural Development and the balance 64.4% was provided by other identified water providers in the state such as: the Federal Government, Local Governments, NGOs, CBOs, CDAs and Private providers. The Ministry's 607 water facilities have a total capacity of 15.012 MLD, while the present production capacity per day is estimated to be 12.258 MLD implying that the Ministry's water facilities presently operate at 81.65 % installed capacity.

Table 6: Sources of Rural Water Supply



Source: Study needs for Rural Water Supply Schemes in Lagos state 2010

Table 7: Operational Capacities Of Rural Water Facilities

S/N	Option	Capacity/Run (Litres)	Functional	Non Functional	Total	Production Per Day (litres) (2 Runs/Day) Assumed.	Capacity Per Day (Litres) (2 Runs/Day) Assumed.
1	MICRO WATER	45,000	16	19	35	1,440,000	3,150,000
2	MOD TYPE A	18,000	162	14	176	5,832,000	6,336,000
3	TYPE A	9,000	277	30	307	4,986,000	5,526,000
4	TYPE B	-	-	-	23	-	-
5	TYPE C	-	-	-	26	-	-
6	TYPE D	-	-	-	40	-	-
	TOTAL	-	-	-	607	12,258,000	15,012,000

Source: Study needs for Rural Water Supply Schemes in Lagos state 2010

Table 8: Rural water facilities in Lagos state

	Micro	Modified Type A	Type A	Type B	Type C	Type D	Borehole	Deep- well	Not classified	Solar	Hand pump	Total
Agege	0	1	3	0	0	0	9	0	0	0	0	13
Ajeromi- Ifelodun	0	1	1	0	0	0	0	0	0	0	0	2
Alimosho	1	38	47	0	0	2	285	7	1	4	4	389
Amuwo Odofin	0	9	0	3	0	2	54	1	1	9	1	80
Apapa	0	0	0	0	0	0	0	0	0	2	0	2
Epe	5	21	36	6	6	9	153	0	5	28	12	281
Eti-Osa	3	8	2	0	0	0	14	0	0	9	0	36
Ibeju-Lekki	4	17	27	1	10	11	27	8	1	22	9	137
Ifako-Ijaiye	0	3	7	0	0	0	33	0	0	0	0	43
Ikeja	0	0	1	0	0	0	0	0	0	0	0	1
Ikorodu	10	36	35	0	1	1	127	19	1	8	5	243
Kosofe	2	18	7	0	0	0	25	2	0	0	0	54
Lagos Island	0	1	1	0	0	0	0	0	0	0	0	2
Lagos Mainland	0	0	1	0	0	0	0	0	0	0	0	1
Mushin	0	2	1	0	0	0	0	0	0	0	0	3
Ojo	2	8	11	5	0	4	67	0	2	14	1	114
Oshodi/Isolo	0	5	3	0	0	0	7	0	0	0	0	15
Shomolu	0	2	1	0	0	0	0	0	0	0	0	3
Badagry	8	21	33	10	12	11	112	17	2	21	39	286
Surulere	0	0	0	0	0	0	0	0	0	0	0	0
Total	35	191	217	25	29	40	913	54	13	117	71	1705

Source: Study needs for Rural Water Supply Schemes in Lagos state 2010

2.9. Urban Sanitation in Lagos State

A very small percentage of Lagos State residents enjoy centralised sewerage. The majority, close to 70 percent of the city dwellers, use septic tanks and similar systems, which are emptied at intervals ranging from 6-12 months. Sanitation problems include open defecation, plastic-bag defecation, various types of latrine, pour-flush toilets, discharging to open drains, and pour-flush toilets discharging to septic tanks.

Service providers include Ministry of Environment which is involved in the construction and management of public toilets under the state's Public-Private Partnership initiative scheme, Ministry of Rural Development which is also involved in the construction of solar-powered toilets in some parts of the state, Ministry of Women Affairs and Poverty Alleviation which implements poverty reduction initiatives which include construction of boreholes in public places and market places, and the State Universal Basic Education Programme which provides child friendly water and sanitation facilities in schools.

Other bodies implementing urban sanitation programmes in the state include the Centre for Rural Development and Local Government Development Areas.

2.10. Rural Sanitation in Lagos State

Ministry of Rural Development has a Rural Water and Sanitation (RUWASSA) Department vested with the responsibility of providing potable water supply and sanitation in the rural and peri-urban communities of the State.

The Ministry constructs VIP toilets of different types, such as Toilets with Solar powered water facility, and promotes good hygiene practices, amongst School children.

Recently, RUWASSA started implementing the Community Led Total Sanitation (CLTS) in some rural areas of the state.

2.11. Wastewater management

Lagos state generates an estimated 3mcm/day presently and this is projected to rise to 4mcm/day in the next few years.

The management of wastewater in the State was given a fillip when five sewage treatment plants were constructed in four Low Cost Housing Estates and Alausa Secretariat between 1978 to 1983; this was followed by the abolition of pail latrine system Law 1986; the introduction of popular flush toilet called "water system" and establishment of its accessory, the septic tank in 1986; the turn around maintenance of Alausa and Oke-afa Wastewater Treatment Plants in 2000; and the rehabilitation of Alausa and Abesan Wastewater Treatment Plants in the years 2007, 2008 and 2009.

Table 9: Major Public Wastewater Treatment Plants in Lagos State

S/No	Location	Capacity (Design Population)	Year of Commission	Status
1	Abesan Estate	50,000	1987	Partially Functional
2	Oke-Afa Estate	40,000	1985	Partially Repaired
3	Amuwo Estate	30,000	1983	Not Operational
4	Iponri Estate	10,000	1983	Partially Repaired
5	Alausa Secretariat			
6	Lagos Island Maternity Hospital			
7	General Hospital Surulere			
8	General Hospital Apapa			

In 2010, the Sewage department in the Ministry of Environment was incorporated into the Lagos Water Corporation and it became known as the Wastewater Management office. The office is presently implementing an approved 5 years Sustainable Sewage and Sanitation Strategy (2010-2015) rolling plan to develop the wastewater sector in the state.

A total population of about 4.9 million is to be served at the end of the 5 year period, while the output is the construction of 10 New Wastewater Treatment plants and the rehabilitation of three existing ones. Wastewater Infrastructural development is expected to increase from the current 6% to about 34% serving a total population of 5.98 million at the end of the 5 year SSSS.

The 5 year SSSS is focusing on metropolitan Lagos, while, peri-urban and rural areas will be addressed in subsequent years.

Chapter Three

Need for Policy and Definition of Terms

3.1. Need for Policy

A WSS policy is needed to address the following challenges in the water supply and sanitation sector at urban areas, slum areas and rural areas of Lagos state:

a. To plan Investment in the WSS sector

Currently, service coverage in urban areas is low and rural coverage is estimated to be well under actual demand for water supply. To increase coverage would require massive investment for the procurement of water supply and sanitation facilities. There is a need for a policy to spell how the development of the WSS sector could be financed from myriad of sources including the public sector, private sector, donor agencies, international financial institutions, communities, civil society organisations and consumers.

b. To Attract Donor Investment

As a corollary to the above, the creation of a specific Rural Water Supply and Sanitation Agency will attract donor investment in the sector, as it will enable investors to track and monitor their investments. A full fledged agency will be able to take decisions speedily, implement programmes timely, have its own accounting and expenditure procedures, and will also be able to develop a mechanism for tracking, monitoring and evaluating its programmes and projects. These are prerequisites required as a condition for external support and funding assistance by various bodies such as UNICEF.

c. To ensure Increased resource allocation by LGAs/LCDAs

LGAs/LCDAs in the state allocate between 1.9% and 2.4% of total budgetary expenditure to water supply and sanitation provision indicating that the third tier of government is yet to fully understand its role and responsibility for rural water supply and sanitation services delivery. Policy is expected to clearly articulate the service provision roles and responsibilities of LGs/LCDAs, as well as financing requirements expected from them.

d. Financing of WSS projects at urban, slum areas and rural levels

The demand responsive approach at rural levels expects hosting communities to contribute financially towards the execution of WSS projects. This philosophy is yet to be internalised in most rural communities in the state and policy needs to ensure stakeholders at the rural level buy in to this arrangement as an element of ensuring project sustainability at rural levels.

e. To ensure better Performance of the LWC

Policy has to set out guidelines for the operation of urban utilities along quasi commercial lines to enable it to recover its operating expenses from their own

revenues. The policy will also outline strategies for achieving efficiency in customer billings, collections and cash flow management.

f. To ensure sustainable cost recovery

The urban utilities should be able to operate autonomously and remain less dependent on state governments for subsidies except for capital costs. To this end, the WSS policy shall spell out guidelines for fixing tariffs taking into consideration both economic and social interests.

g. To correct absence of Appropriate Regulation

Though the Lagos Water Law of 2004 provides for the set up of a Water Supply Regulatory Body for service regulation of the LWC and the informal sector, this is yet to be functional. Policy will spell out the institutional framework for this body.

h. To ensure sectoral coordination

Policy will enable co-ordination at various levels and provide a basis for the development, implementation, monitoring and evaluation of various WSS programme components by sub-sector partners and stakeholders as well as provide enabling environment for support by External Support Agencies.

i. To reallocate Institutional roles and responsibilities

WSS service provision, regulatory and policy formulation responsibilities are distinct responsibilities that are best handled by separate institutions and agencies in line with best practices as contained in the National guidelines. This is not yet the case in Lagos state, as such the policy needs to identify appropriate agencies to discharge these roles.

j. Private Sector Partnership

Lagos has committed itself to promoting PSP as a potential means of improving service delivery and investment in the water sector, but the state lack the policy and regulatory environment and expertise to attract and sustain private investment. Lagos State laws are not clear on the role, rights and obligations of private parties in the provision of WASH services. Policy will outline role of the private sector in the sector.

k. Waste water management

The state has recently recognized waste water as part of the total water cycle and this is evidenced through the creation of the Office of Wastewater management. However, the mandate of the office includes policy formulation, service provision and regulatory function in wastewater management. There is need to develop the policy guidelines for wastewater management which ensures differentiation of duties and responsibilities in line with best practices.

l. Rural Water Supply and Sanitation services delivery

At rural levels in the state, all the three tiers of Government, i.e. Federal, State and Local Governments, as well as private sector, Non-Governmental Organizations (NGOs), Communities, charities and individuals are all involved in the provision of water facilities to the rural areas of Lagos state. This needs to be harmonised, coordinated and monitored. There is therefore a need to put in place, an enduring

policy that would guide the Provision, Monitoring and Evaluation (M&E), and Management of water schemes in the rural areas.

m. Climate change, Water Supply and Sanitation

Generally, the state needs to develop a sectoral response to climate change as provision of safe water supply and sanitation services are highly vulnerable to drought, flood extreme precipitation, and sea level rise. The perceived risks of climate change on water supply in Lagos state include the following:

- i. Variance in precipitation will significantly affects quantity and quality of water supply in the state.
- ii. Increased precipitation intensity and variability are projected to increase the risks of flooding and/or drought in many areas of the state and exacerbate many forms of water pollution.
- iii. Higher water temperatures and changes in extreme including floods and droughts, are projected to affect water quality and pose risks to safe sanitation.
- iv. Current water management practices may not be robust enough to cope with the impacts of climate change on water supply and sanitation services.

n. Groundwater demand management

A study commissioned by the Rural Water Supply Department of the State Ministry of Rural Development shows that 92% of domestic water users in the state depend on groundwater sourced from boreholes, while only 8% of surveyed users access water supply through piped networks. It is therefore pertinent that abstraction of underground water resources in the State be co-ordinated and monitored to avoid over abstraction.

o. Water quality monitoring and assessment

Service providers particularly small scale providers of water supply are presently having a field as there is no body that is vigorously engaged in setting and enforcing water quality standards. Policy is expected to identify appropriate body that should discharge this assignment.

p. WASH in Schools

Policy is expected to outline strategies for the implementation of water supply, sanitation and Hygiene campaigns among school pupils to reduce high infant and maternal mortality caused by water borne and water related diseases.

q. Urban Sanitation

Policy is expected to set guidelines for household water treatment, set guidelines for wastewater treatment by commercial and industrial bodies, provide standards for effluent discharges by industrial concerns, and outline strategies for the provision of public toilets in open places such as markets, motor parks and bus stops.

r. Slum area sanitation

There are several slum areas in the state that are not covered by urban and rural service providers. There is also no strategic approach and plan to ensure the inhabitants access safe sanitation services. These slum areas include Badiya, Ajegunle, Makoko, Okokomaiko, Ilaje to mention a few.

Policy will identify agencies that should be responsible for the provision of services to slum areas in the state, outline approaches such as Urban Led Total Sanitation for delivery of safe sanitation services for slum areas.

s. Water supply and Sanitation Governance

Water Consumer Associations (WCAs) and Water, Sanitation, and Hygiene Committees (WASHCOMs) have been accepted as the ideal structure for ensuring community ownership and management of WSS systems at small towns and rural communities under a demand responsive approach. While WCAs may not be needed in Lagos state due to the near absence of small towns, WASHCOMs do not exist in most rural communities in the state. The role of traditional structures such as Community Development Associations and Community Development Committees in WASH service delivery also needs to be defined. The WSS policy will suggest structures for good water governance especially at slum areas and rural areas of the state.

t. Appropriate technologies for service delivery

While the appropriate technologies for delivery service at urban and rural levels are well known, those of slum areas are yet to be well documented and implemented in most parts of Nigeria. For instance, how do we deliver safe WASH services to the estimated 1million inhabitants of Makoko, a slum community lying on the Lagos lagoon? WSS policy will use practices in similar situations in other parts of the world to outline approaches for delivery of WSS services to slum areas of the state.

u. Water supply and Sanitation sector Integrity

Incidences of corrupt practices involving service providers and users decreases the efficiency of the sector and the value of funds budgeted for the sector. Policy will set up guidelines to ensure increased accountability, transparency, openness in the sector, and generally promote water supply and sanitation integrity.

3.2. Definition of Terms

Access	For the purpose of this policy, access to water supply is defined as the availability of at least 30 litres of water to a person per day from a source within 250 metres of dwelling; and access to sanitation is defined as availability of adequate excreta disposal facilities that can effectively prevent human, animal and insect contact with excreta within 500 metres from position of need.
Coverage	Proportion of a given population that are served by the service provider
Decentralized wastewater management	Decentralized wastewater management implies managing wastewater as close as practical to where it is generated and to where its potential beneficial reuse is located.
Demand responsive approach	The provision of water and sanitation services to meet specific locality requirements based on effective demand by communities

	actively seeking to improve these services.
Domestic water use	The use of water for household purposes and personal hygiene
Drinking water quality	The chemical, physical, and biological characteristics of water, usually in respect to its suitability for drinking. The level of water quality is based upon the evaluation of measured quantities and parameters, which then are compared to water quality standards, objectives or criteria.
Effluent discharge	This is a fluid such as domestic sewage and industrial liquid waste (untreated, partially treated, or completely treated), which flows out of a treatment plant, sewer, or industrial outlet or domestic outlets. Generally it refers to wastes discharged into surface waters.
Effluent standard	This is the maximum amount of specific pollutants allowable in wastewater discharged by an industrial facility or wastewater treatment plant. The standards are set for individual pollutants and apply across all industrial categories.
Environmental Sanitation	This is concerned with the on-going management, operation and maintenance of the removal and disposal of liquid and solid wastes from all premises and their surroundings and their disposal in a way that it does not cause harm to either people's health or the environment.
Gender-sensitivity and mainstreaming	Is the process of ensuring that policy formulation, project development and monitoring are gender sensitive by integrating and institutionalizing gender issues in policies, plans and programmes.
Ground water	Subsurface water in a saturation zone below the surface of the earth often in naturally occurring reservoirs in permeable rock strata or aquifer; the source for wells and natural springs.
Hygiene education	The process of developing and teaching hygienic practices as part of health promotion including providing teaching and learning materials as well as supporting information, education and communication for awareness creation on the effects of poor hygiene. The aim is for behaviour change for maintaining personal hygiene and cleanliness of facilities and surroundings.
Integrated water resources management (IWRM)	Integrated water resources management is based on the perception of water as an integral part of the ecosystem and other natural resources, and a social and economic good, whose quantity and quality determine the nature of its utilization.
Level of Service	A specified type of water and sanitation service appropriate for meeting the health and welfare (including environmental considerations) needs of targeted communities. The services are provided relying on effective demand by communities.
Potable Water	Water of specified quality standard meant for drinking purposes.

Rainwater harvesting	The collection of rainwater for use in growing crops and for other human use. It is done through run-off harvesting or roof water harvesting.
River basin	The land area drained by a river and its tributaries or the land area surrounding one river from its headwaters to its mouth.
Water Sanitation	Water sanitation for the purpose of this policy, shall be defined as effective hygiene practice, handling and disposal of excreta, liquid (sewerage, sullage and storm water) and leachates from dump sites (solid wastes) in so far as it affects water sources. Sanitation wherever mentioned in this policy shall refer to water sanitation.
Adequate sanitation	Adequate sanitation means access to safe excreta disposal facilities, services to households, public facilities, and disposal of liquids. Upgrading traditional latrines to reduce flies and odour, and provide superstructures; provision of water flush system (septic tank/soak away) and sewerage system; and provision of hand washing facilities after use.
Surface water	Water that sits or flows above the earth, including lakes, oceans, rivers, streams, wetlands and in reservoirs constructed by man.
Sustainability(of systems)	This refers to the continued use of water and sanitation services, including the maintenance, throughout the design life of the system, of structural and functional condition of installed facilities, preservation of prescribed quantity and quality of water, taste and colour, and reliable follow-up support (O&M) from service providers and beneficiaries.
Water demand	The quantity and quality of water consumers (including communities) will choose to consume at a given price (including valued resources such as time or labour given in exchange of service)
Water resources	A general term encompassing the concepts of availability (the location, spatial distribution, or natural fluctuations of water); accessibility (given availability, whether consumers can have water or can afford water in adequate quantities); and quality (whether accessed water is free of contaminants and safe for consumption).

**Sewage, Sewer,
Sewerage.**

Sewage is the effluent in a pipe network. Sewer is the conduit - usually a pipe - used to carry off water and waste matter. Sewerage is the complete system of sewers provided for collection of sewerage with or without storm water runoff.

**Domestic
Wastewater**

Wastewater from toilet flush, urinal, kitchen, , laundry, car wash, garden run off and soak away leachates from buildings, residential homes, schools, estates both government and private, mobile toilet, on site toilet to include public toilets.

**Commercial
Wastewater**

Industrial

Wastewater

Medical Wastewater

Wastewater from trade, hotels, eateries, high rise buildings, bus terminals, and abattoirs.

Wastewater from industries.

Wastewater from Hospitals, Clinic, Mobile Hospitals, Medical Laboratories, Pharmaceuticals and Mortuaries.

Chapter Four

Policy Components

4.1. Objectives

To provide safe drinking water and sanitation services for residents of Lagos State sustainably.

4.2. Policy Guidelines

- **Urban areas:** This comprises metropolitan areas of the state, excluding slum areas.
- **Slum areas:** Unplanned settlements inhabited by low income citizens within urban areas of the state such as parts of Badija, Ilaje, Makoko, Katagonwa, and Ajegunle communities
- **Rural areas**– communities with population up to or less than 25,000 mainly within Ikorodu, Epe, Ibeju Lekki, Alimosho and Badagry LGAs of the state.

4.3. Target Levels

The policy aims at extending safe drinking water, and sanitation coverage to 60% of the population in urban and rural areas by 2015, and 100% coverage by the year 2020.

Targets for Water Supply coverage

	2012	2015	2020
Urban	40%	60%	100%
Slum Areas	40%	60%	100%
Rural	40%	60%	100%

Targets for Sanitation coverage

	2012	2015	2020
Urban	40%	60%	100%
Slum areas	40%	60%	100%
Rural areas	40%	60%	100%

4.4. Service Standards

In line with the national policy:

- a. *Water supply service level for the rural areas shall be 30 litres per capita per day within 250metres in the community serving about 250-500 people per water point.*
- b. *Water supply service level for the urban areas and slum areas shall be 100 litres per capita per day within 250 metres in the community serving about 250-500 people per water point.*
- c. *Sanitation services shall be available within every 500 metres in public places.*

4.5. Principles

- a. Lagos state will separate the distinct responsibilities of WSS service provision, policy formulation, and regulatory duties among sector bodies in the state.
- b. Lagos state government shall be responsible for financing capital investment in the WSS sector.
- c. Water is a social good, an economic good, as well as an environmental good.
- d. Lagos state recognises the Right to safe water and sanitation services and shall implement policies, programmes and projects to ensure a universal coverage by 2020.
- e. The Lagos State Water Regulatory Commission shall develop a formula for setting tariffs by WSS agencies. The LWC shall meter all water supply connections while provisions are made for social kiosk/public taps to serve poor and vulnerable groups.
- f. Lagos State recognises that Climate change has huge potential impacts on the provision of water supply and sanitation services, and will support measures by sectoral agencies to mitigate as well as adapt to climate changes.
- g. The private sector shall be encouraged to participate in service provision and delivery at urban areas through various PSP options like management contracts, service contracts, supply contracts, and consultancies.
- h. Water supplies in the state shall be in conformity with the Nigerian Standard for drinking Water quality. Lagos State Environmental Protection Agency and Lagos State Drug Quality Control Laboratory shall jointly enforce the Nigerian Standard for Drinking Water Quality.
- i. Stakeholders shall be involved in the development of the water supply and sanitation sector through participatory investment.
- j. To ensure 'Equity and Inclusion' decisions in the WSS sector shall accommodate gender needs and interests; WSS governance structures shall reflect all stakeholders particularly women; and services shall be accessible to the disabled, the visually impaired, People living with HIV and AIDS and the physically challenged.
- k. The State shall develop a framework for delivery WSS services to slums areas in the state.
- l. The State recognises the role of small scale water service providers in delivery service to blighted areas, and will engage with them to ensure improvement in the quality of service delivery.
- m. The state WSS agencies shall implement a Stakeholders engagement policy that ensures service delivery meets customer needs and preferences.

4.6. Policy Strategies

4.6.1. Ensure Universal coverage of safe WSS by 2020

- a. Conduct Institutional assessment of sector agencies.*
- b. Conduct baseline survey of current water and sanitation facilities to determine number of such facilities, distribution, and functionality.*
- c. Develop Sector master plan; Medium Tern Sector Strategies, Medium Term Sector Expenditure Plan; and an Investment plan.*
- d. Develop a Wastewater master plan.*
- e. Increase appropriation for sectoral programmes and projects.*
- f. Conduct study to access impact of climate change on WSS and develop adaptation and mitigation plans.*
- g. Rehabilitate facilities that are not operational.*

- h. Construct new facilities in line with policy targets.*
- i. Develop Water and Sanitation sector Law.*
- j. Create a Ministry for Water Resources.*
- k. Create Department of Water supply and Sanitation in the Ministry of Water Resources.*
- l. Create a Rural Water Supply and Sanitation Agency.*
- m. Set up a State Water Regulatory Commission*
- n. Create a State Steering Committee on Water Supply and Sanitation that will develop guidelines for sanitation in public places.*
- o. Create a State IWRM committee that will balance water resources demand and supply management in the state. Membership shall comprise the following bodies:*
 - i. Ministry of Water Resources*
 - ii. Ministry of Environment.*
 - iii. Ministry of Agriculture*
 - iv. Ministry of Rural Development*
 - v. Rural Water Supply and Sanitation Agency*
 - vi. Ogun Osun River Basin Development Authority*
 - vii. The Private sector*
 - viii. Water supply and Sanitation Users*
- p. Develop monitoring indicators and implement a monitory mechanism.*
- q. Increase technical understanding of sector players through conduct of training programmes.*
- r. Ensure that Nigerian Standard for drinking water quality are maintained by service providers*
- s. Ensure women occupy at least 35% of appointive and elective positions in the WASH sector including leadership positions.*
- t. Develop Water Safety Plans that ensures the minimization of contamination of source waters, the reduction or removal of contamination through treatment processes and the prevention of contamination during storage, distribution and handling of drinking water.*
- u. Establish a database of Stakeholders, working in the water and related sectors in Lagos State.*
- v. Promote and support citizen's participation and engagement in service delivery ,strengthen Customer care centres to provide information to consumers, address issues of service delivery, organise Interactive programmes such as Public forums with its consumers, support the conduct of customer surveys and opinion polls to receive feedbacks on its operations, educate consumers on service delivery issues through the production of newsletters, magazines, radio and television programmes and documentaries, and harness Information and Communication Technologies such as Audio visuals, Text messages, Internet platforms, to deliver messages and mobilise consumers.*
- w. Ensure membership of water supply and sanitation governance structures in the state shall draw from WSS stakeholders including women, disabled and vulnerable groups.*
- x. Ensure the needs and interest of the disabled groups such as physically challenged, visually impaired, people affected by HIV/AIDS, and vulnerable groups are taken into consideration in the location and construction of water points and sanitation services.*
- y. Promote decentralized systems such as called DEWATS/ Wet ecosanitation.*
- z. Ensure functionality and proper coordination of Sanitary task groups.*
- aa. Establish Waste contamination control points along coastline in the state.*
- bb. Review the Lagos Water law to accommodate a Wastewater Management Law.*
- cc. Promote the participation of the private sector in wastewater management.*
- dd. Promote Accountability, Openness, Transparency, and Integrity.*

ee. Prepare annual reports and disseminate to stakeholders.

4.6.2. Improve urban water supply service coverage and service levels

- a. Reduce water theft, leakages and pipeline vandalisation.*
- b. Develop guidelines for private sector participation.*
- c. Increased investment in Alternative Power Plants to reduce reliance on public power supply.*
- d. Increase appropriation for urban water supply projects.*
- e. Rehabilitate facilities that are not operational.*
- f. Construct new facilities in line with policy targets.*

4.6.3. Improve slum areas water supply service coverage and service levels

- a. Develop of a Strategic framework for delivering services to slum areas and urban poor.*
- b. Promote the establishment of Community-scale drinking water treatment systems including filtration or disinfection plants that provide safe drinking water from existing sources*
- c. Support efforts of the Informal sector in providing services to blighted areas and areas not covered by the conventional public service.*
- d. Form of gender sensitive WASHCOMs*

4.6.4. Improve rural water supply service coverage and service levels

- a. RUWASSA shall assist LGAs to establish RWSS Departments, and provide training, technical support to them.*
- b. Adopt demand responsive approach and promote community participation in decision making process, ownership, and management of water facilities.*
- c. Form gender sensitive WASHCOMs*
- d. Develop guidelines for community ownership of water and sanitation facilities.*
- e. Raise awareness of cost sharing arrangement*
- f. Protect Traditional water supply sources and traditional water quality practices.*
- g. Encourage construction of protected hand-dug wells equipped with hand pumps, protected springs, motorised or solar powered boreholes with submersible pumps/aeration/filtration tanks, rain water catchments systems, Filtration system mechanised and hand-pumped boreholes by the Rural Water Supply and Sanitation Agency and/or Local Government Development Councils*
- h. At house hold levels, the state shall promote the establishment of point of use systems, low cost, small scale house water treatment such as disinfection systems, ceramic filters, flocculation/ disinfection products, solar disinfection, and household boiling.*

4.6.5. Improve urban sanitation service coverage and service levels

- a. Promote Hygiene and health in curricula of primary, secondary and tertiary schools.*
- b. Promote establishment of Environmental Health clubs in schools.*
- c. Promote Hand washing behaviour.*
- d. Adopt decentralized wastewater management.*
- e. Technology options include- Waste stabilisation pond, aerated lagoon, Oxidation ditch, Packaged system, Trickling filter, Activated sludge or other appropriate technology.*

4.6.6. Improve slum areas sanitation service coverage and service levels

- a. Develop of a Strategic framework for delivering services to slum areas and urban poor.*

- b. Support efforts of the Informal sector in providing services to blighted areas not covered by the conventional public service.*
- c. Form of gender sensitive WASHCOMs*
- d. Promote Hygiene and health in curricula of primary, secondary and tertiary schools.*
- e. Promote establishment of environmental Health clubs in schools.*
- f. Promote Hand washing behaviour.*
- g. Establish community-managed toilets in response to demand for sanitation services.*
- h. Promote construction of Sanplat (Sanitary Platform) latrine, V.I.P latrines, Traditional Pit latrines, Water Closet plus septic tank, and Aqua privy*
- i. Implement of PSP options such as construction of toilets in public places by private sector firms.*
- j. Ensure buildings in low lying and shallow water tables adopt other onsite sanitation technologies apart from soakways and septic tanks.*

4.6.7. Improve rural sanitation coverage and service levels

- a. RUWASSA to assist LGAs establish RWSS Departments, and provide training, technical support to them.*
- b. Adopt demand responsive approach in design and implementation of WASH projects*
- c. Form gender sensitive WASHCOMs.*
- d. Promote of community participation in decision making process, ownership, and management of water facilities.*
- e. Develop guidelines for community ownership of water and sanitation facilities.*
- f. Raise awareness of cost sharing arrangement.*
- g. Promote Hygiene and health in curricula of primary, secondary and tertiary schools.*
- h. Promote establishment of Environmental Health clubs in schools*
- i. Promote Hand washing behaviour.*
- j. At the household or community levels: promote on-site, low-energy and low-cost systems including ecosanitation approaches and traditional septic tanks.*

Chapter Five

WSS financing

5.1. Sources of funding

Funding for the development of the water supply and sanitation sector in Lagos state shall come from the following sources:

- a. *Federal Government of Nigeria acting through budgetary allocations and/or the proposed Water Investment and Mobilisation Guidelines (WIMAG) when approved.*
- b. *Lagos State Government*
- c. *Local Governments Authorities.*
- d. *Formal users, such as households, and businesses.*
- e. *Informal suppliers, such as water vendors operating boreholes.*
- f. *Private companies, either local or foreign.*
- g. *Non-governmental organizations raising funds from voluntary private contributions or grants from international agencies.*
- h. *Benefiting communities.*
- i. *Local banks and other financial institutions, offering short-term or medium-term loans at market rates.*
- j. *International Financial Institutions*
- k. *International aid from multilateral, bilateral sources, or external support agencies available as loans on concessional terms or grants*

5.2. Commercial policy

- a. *The LWC shall progressively meter all water supply connections..*
- b. *For urban water supply, tariffs shall in the minimum, cover the cost of production (including operation and maintenance), but not aimed at recovery of capital cost.*
- c. *The determination of Water Tariffs shall be based on a methodology set by Lagos State Water Regulatory Commission.*
- d. *Provisions shall be made for social kiosk/public taps to serve the poor and vulnerable communities.*
- e. *Tariff policy shall ensure cross subsidy to accommodate water supply and sanitation needs of the poorest of the poor, including vulnerable and marginalised groups, People living with HIV and AIDS, residents of slum areas, the disabled, and orphanages.*
- f. *Water subsidies when considered necessary, should be affordable to Government that is providing them, targeted to the groups intended to benefit, (designed and) transparently administered with the involvement of the intended beneficiaries.*
- g. *At times of natural and health emergencies such as droughts and outbreak of water borne diseases, domestic consumers of public water supply in the affected areas as specified by the Lagos State Emergency Management Agency (LASEMA) and the Ministry of Health in conjunction with the service providers shall have daily access 30 litres of drinking water, free, as a right, every day, until the water related diseases is eradicated. During such natural and health emergencies, the LWC shall not disconnect any domestic water consumer.*

Table 10: Cost Sharing For Capital Investment for Water Supply
 Slum areas/Rural Water Supply Urban Water Supply

Agency	Short term	Medium term	Long term	Short term	Medium term	Long term
<i>State Government</i>	95%	90%	80%	100%	75%	50%
<i>Local Government</i>	4%	7.5%	15%	-	-	-
<i>Community</i>	1%	2.5%	5%	Nil	Nil	
<i>Consumers through Tariffs</i>				Nil	25%	50%

Table 11: Cost Sharing For Capital Investment for Sanitation

Agency	Slum areas Rural Sanitation	Urban Sanitation
<i>Government Agencies/Private Sector/Charities</i>	75%	100%
<i>Local Government</i>	20%	Nil
<i>Community</i>	5%	Nil

Table 12: Cost Sharing for O & M- Water Supply

Agency	Slum areas/Rural Water Supply	Urban Water Supply
<i>State Government</i>	50%	Nil
<i>Local Government</i>	Nil	Nil
<i>Community</i>	Nil	Nil
<i>Consumers through payment of Tariffs</i>	50%	100%

Chapter Six

Policy Statements

6.1. Water Supply

1. Drinking water supply in Lagos State shall meet or exceed safe water quality standards of the Nigerian Standard of Drinking Water Quality.
2. The Lagos State Environmental Protection Agency and the Lagos State Drug Quality Control Laboratory shall enforce the Nigerian Standard for Drinking Water Quality.
3. All buildings must maintain adequate set backs, air spaces, and right of way so as to facilitate installation of water mains within utility spaces.
4. All proposed private/public estate developments (Residential/Commercial/Industrial mixed use schemes), Schools, Markets, Hospitals, Recreational properties, Banks, Hotels, Petrol filling stations, shall make provision for water supply and sanitary conveniences in their design and plans.
5. All Physical Development Plans such as Regional plan, Master plans, Model city plans, Action area plans, Structure plans, District, Local and Neighbourhood plans should take into consideration the state water supply and sanitation requirements.
6. Persons or Institutions intending to drill boreholes for industrial and domestic purposes shall inform the State Ministry of Water Resources for the purposes of groundwater monitoring and demand management.
7. Residents and Institutions are not expected to extract groundwater for drinking purposes where a public water supply exists within a radius of 100 yards.
8. Water supply and Sanitation facilities in public places and offices shall be accessible by disabled groups. Appropriate labels shall be inscribed on WSS facilities to aid literacy by disabled groups.
9. People affected by HIV/AIDS shall be given special consideration in accessing safe water supplies.
10. For on-site drinking water system, a minimum distance of 15 meters shall be kept between the water system and potential source of contamination.

6.2. Sanitation

11. Residential and Commercial buildings, mobile homes, markets, schools, health institutions, petrol stations, military and Para-military formations, the Police, bus

terminals, other locations and public places shall have a adequately sized sanitary convenience, septic tank and away pits.

12. All proposed private/public estate developments (Residential/Commercial/Industrial mixed use schemes), Schools, Markets, Hospitals, Recreational properties, Banks, Hotels, Petrol filling stations, shall make provision for water supply and sanitary conveniences in their design and plans.
13. All Physical Development Plans such as Regional plan, Master plans, Model city plans, Action area plans, Structure plans, District, Local and Neighbourhood plans should take into consideration the state water supply and sanitation requirements.
14. Residents should refrain from open spitting, defecation, and urination.
15. It shall be the responsibility of every owner or operator of a restaurant, hotels, night club or school to ensure the cleanliness of all toilets and bathrooms within the premises and its environs.
16. Water supply and Sanitation facilities in public and private places shall be accessible by disabled groups.

6.3. Wastewater management

17. Government, Private estates schemes and excised villages accommodating minimum of 500 persons and above shall make provision for installation of Central Sewage Treatment Plants.
18. Firms employing more than 50 persons are required to have an on-site wastewater treatment facility.
19. Every house in the state shall have a holding tank for liquid waste of sewage. Every households or commercial premises shall ensure there is a distance of a minimum of 50 feet between the location of a Septic tank/soak away and a borehole drilled /well dug within the premises. Soakaways shall always be located at the back of households and boreholes/wells located in the forefront.
20. Sewage effluents or liquid waste shall not be discharged into any public drains or drainage channels, road, gorges or into public water course.
21. No person or body shall discharge, deposit or cause to be discharged or deposited any contaminants, pollutants or toxic substances onto surface water or into ground water.
22. Major roads networks shall make provision for wastewater ducts.

Chapter Seven

Institutional Roles and Responsibilities

Policy formulation and WSS Coordination bodies

1. Ministry of Water Resources
2. Lagos State Steering Committee on Water Supply and Sanitation
3. Local Government Areas/Local Council Development Areas.

Service Providers

1. Lagos Water Corporation
2. Lagos State Wastewater management office
3. Lagos State Rural Water Supply and Sanitation Agency

Regulatory Body

Lagos State Water Regulatory Commission

Consumers

1. Community Development Associations (CDAs)
2. Water, Sanitation and Hygiene Committees (WASHCOMs)
3. Household consumers
4. Institutional consumers

Support Services

1. Lagos State Government
2. State House of Assembly
3. Ministry of the Environment
4. Ministry of Rural Development
5. Ministry of Health through the *Lagos State Drug quality control laboratory (LSDQCL)*
6. Ministry of Education
7. Lagos State Environmental Protection Agency
8. Ministry of Women Affairs and Poverty Alleviation
9. Ministry of Physical Planning and Urban Development
10. Lagos State Universal Basic Education Board
11. Ministry of Women Affairs and Poverty Alleviation
12. Ministry of Justice
13. Ministry of Agriculture
14. Local Government Development Areas
15. Ministry of Information
16. Lagos State Water Court
17. Development partners/Donor agencies
18. Non Governmental Organizations
19. Community Development Associations/Community Based Organisations
20. Professional bodies

21. Private Sector

Policy formulation and WSS Coordination bodies

7.1 Ministry of Water Resources

- a. *Policy formulation on Water Supply and Sanitation.*
- b. *Develop sector plans including Master plan for Water Supply and Sanitation, Medium Term Sector Strategies, Medium Term Expenditure Framework, and Investment plan for Water Supply and Sanitation.*
- c. *Conduct of sectoral studies, assessments and surveys.*
- d. *Support water services providers in developing and implementing Water Safety Plans.*
- e. *Provide technical support to Lagos Water Corporation, and Rural Water and Sanitation Agency in the planning and implementation of their programmes.*
- f. *Receive quarterly reports of activities from Lagos Water Corporation, and Rural Water Supply and Sanitation Agency.*
- g. *Mobilize resources for these WSS agencies including ensuring the timely release of budgetary allocation for capital expenditure.*
- h. *Serve as Hosting Institution for the State Steering Committee on Water supply and Sanitation.*
- i. *Create a State Water Supply Data Bank.*
- j. *Be responsible for Inter-governmental cooperation Agencies on matters relating to water supply and sanitation*
- k. *Approve and Implement new International and National policy instruments for the development of the sector, such as the Water Investment and Mobilisation Guidelines (WIMAG) (when adopted by the Federal Government.*

7.2. State Steering Committee on Water Supply and Sanitation

The body shall be hosted by the Ministry of Water Resources and its members shall include representatives of the following bodies:

- i. *Ministry of Water Resources*
- ii. *Ministry of Rural Development*
- iii. *Ministry of the Environment*
- iv. *Ministry of Economic Planning and Budget*
- v. *Ministry of Health*
- vi. *Ministry of Education*
- vii. *Lagos State Universal Basic Education Board*
- viii. *Ministry of Women's Affairs and Poverty Alleviation*
- ix. *Ministry of Information*
- x. *Ministry of Physical Planning & Urban Development*
- xi. *News Town Development Agency.*
- xii. *Development Partners/External Support Agencies*
- xiii. *Ogun Osun River Basin Development Authority*
- xiv. *Meteorological Agency*
- xv. *WASHCOMs*
- xvi. *Community Development Councils (CDCs)*

- xvii. *Chamber of Commerce and Industries, Lagos State Chapter*
- xviii. *Manufacturers Association of Nigeria, Lagos State Chapter*
- xix. *The Private sector*
- xx. *Labour Union*
- xxi. *Civil Society Organisations*
- xxii. *The Media*
- xxiii. *Local Government Areas/Local Council Development Areas*

Functions

- a. *Coordinate policies and programmes of State MDAs on sanitation.*
- b. *Develop guidelines for School sanitation, construction of sanitary facilities, and drilling of boreholes for domestic, agricultural or industrial water supply.*
- c. *Coordinate and harmonise the contributions of development partners, charities, and religious bodies in the sector.*
- d. *Oversee water resources demand and supply management in the state.*

7.3. Local Government Area/Local Council Development Areas

- a. *Establishment and funding of Water Supply and Sanitation Departments.*
- b. *Development of Rural Water Supply and Sanitation (RWSS) Policy, Sector Strategies, Master plan, and Investment plan.*
- c. *Conduct of sectoral studies, assessments and surveys.*
- d. *Keep an inventory of water supply and sanitation facilities in all communities and monitor their operational status, functionality, and coverage.*
- e. *Implementation of Water Supply and Sanitation projects.*
- f. *Participate in cost sharing of Water and Sanitation projects in communities.*
- g. *Assist communities to form WASHCOMs and provide Technical support for the WASHCOM.*
- h. *Train WASHCOM members on Rainwater harvesting, Household water storage and treatment etc*

Service Providers

7.4. Lagos Water Corporation

- a. *Water service delivery in cosmopolitan Lagos comprising urban and slum areas.*
- b. *Development and maintenance of water supply facilities in urban and slum areas of the state.*
- c. *Prepare plans and conduct research and studies for the implementation and development of WSS projects.*
- d. *Promote Private Sector Participation in water services delivery for purpose of financing, management and provision of urban water supply services.*
- e. *Enter into Public Utility Partnerships (PUPs) with well performing public utilities locally, nationally and internationally for the purposes of sharing experiences and learning knowledge on best practices.*
- f. *Submit to the Ministry of Water Resources quarterly reports of activities.*
- g. *Fix tariffs based on a methodology determined by Lagos State Water Regulatory Commission.*
- h. *Develop and Implement a Stakeholders programme to promote good customer relations and feedback system, to ensure that water service provision reflects needs and demands of all user groups.*

- i. *Develop and implement a Water Safety Plan.*
- j. *Monitor and evaluate water services delivery to achieve policy targets.*

7.5. Lagos State Wastewater Management Office

- a. *Develop, manage, and maintain public wastewater system for all properties, domestic, commercial, agricultural, medical and industrial users.*
- b. *Undertake wastewater treatment.*
- c. *Locate and site all wastewater disposal points.*

7.6. Lagos State Rural Water Supply and Sanitation Agency (RUWASSA) :

- a. *Design the State Rural Water Supply and Sanitation Programme including Strategy and Investment plan.*
- b. *Formulate guidelines and policies on Rural Water and Sanitation projects that encourage sustainability at the grassroots.*
- c. *Implement the State RWSS projects for the provision of water supply and sanitation services to rural communities.*
- d. *Manage all Rural Water and Sanitation projects in the State.*
- e. *Maintain a RWSSS database including inventory of water supply and sanitation facilities in all rural communities.*
- f. *Hand over all small scale Rural Water and Sanitation projects in the State to the communities for ownership and management.*
- g. *Technically assist LGAs/LCDAs to establish RWSS Department;*
- h. *Mobilize financing for RWSS.*
- i. *Submit to the Ministry of Water Resources quarterly report of activities.*
- j. *Develop and implement a Water Safety Plan.*
- k. *Manage all Rural Water and Sanitation projects in the State.*

Regulatory body

7.7. Lagos State Water Regulatory Commission

- a. *Develop the methodology for the determination of Tariffs to be charged by providers of water supply, sewage, wastewater management service in Lagos state.*
- b. *Set standards for provision of water supply, sewage and wastewater management services in Lagos state by public or private providers.*
- c. *Mediate between water supply, sewage and wastewater management service providers, and consumers on service quality and tariffs; and investigate complaints against service providers on same.*

Consumers

7.8. Water, Sanitation, and Hygiene Committees

- a. *Create Water, Sanitation, and Hygiene Committees in slum areas and rural communities.*
- b. *Own and manage Rural Water and Sanitation facilities in slum areas and rural communities.*
- c. *Mobilise citizens towards prompt payments of tariffs.*
- d. *Embark on Budget tracking and reporting for accountability and transparency.*
- e. *Monitor Water systems and Sewerage works and report incidences of malfunctioning or leakages.*
- f. *Protect Water systems and Sewerage works against vandalisation.*

- g. *Part financed capital cost of Rural WSS facilities.*
- h. *Develop community water quality control and surveillance mechanisms in slum areas and rural communities. .*
- i. *Implement Community Led Total Sanitation in slum areas and rural communities.*
- j. *Mobilise community members towards payment of the capital cost contributions.*

Support Services

7.9. Lagos State Government

- a. *Finance capital requirements for water supply and sanitation infrastructural development at all levels.*
- a. *Enact relevant water supply and sanitation laws to implement water supply and sanitation policies and programmes.*
- b. *Grant increased autonomy to the State WSS agencies and insulate them from politicisation.*
- c. *Approve new policies and programmes to develop the sector.*
- d. *Guarantee contracts by public utilities with Charities, International donors and Financial Institutions for the raising of loans, bonds, grants and aids to develop the sector.*

7.10 Lagos State House of Assembly

- a. *Appropriate adequate funds for water supply and sanitation infrastructural development at all levels.*
- b. *Enact relevant water supply and sanitation laws to implement water supply and sanitation policies and programmes.*
- c. *Grant increased autonomy to the State WSS agencies and insulate them from politicisation.*
- d. *Discharge oversight functions over the WSS institutions in the state to ensure public accountability, transparency, openness and integrity.*

7.10. Ministry of Health

- a. *Promote safe health practices, focusing on safe water, good hygiene, diarrhoea control and proper excreta disposal.*
- b. *Promote establishment of Environmental health clubs in schools including inclusion of hygiene and health in curricula of primary, secondary and tertiary schools*
- c. *Ensure functionality and coordination of sanitary task groups.*
- d. *Promote Hand washing and involvement of the private sector in this regard.*

7.11. Ministry of Education

- a. *Collaborate with Ministry of Water Resources and RUWASSA on implementation of School sanitation programmes.*
- b. *Promote Water, Sanitation and Hygiene education as part of the curricular of Nursery, Primary and Secondary schools in the state.*

7.16. Lagos State Environmental Protection Agency

- a. *Enforce the Nigerian Standard for Drinking Water Quality in conjunction with the Lagos State Drug Quality Control Laboratory.*

7.17. Ministry of Women Affairs and Poverty Alleviation

- a. *Implement pro poor WSS projects for poverty reduction among women in urban, slum areas and rural areas.*
- b. *Ensure gender mainstreaming into water and sanitation issues in the state.*
- a. *Mobilize women to participate in Water and Sanitation bodies at all levels. (including the State Steering Committee on Water Supply and Sanitation and WASHCOMs.*
- b. *Review WSS projects in the state to determine benefits and opportunities available to women, possible negative impact on women and ways of mitigating these negative effects; and make appropriate recommendations.*

7.18. Ministry of Physical Planning and Urban Development

- a. *Ensure all new building plans or extension plans to old buildings have provision for Sanitation facilities including toilets, soak ways and septic tanks.*
- b. *Ensure all Building plans or extension plans for old buildings have provision for water facilities either through connection to public water supply or wells and boreholes*
- c. *Ensure Building plans for Estates promote joint/central sources of water supply and centralized sewage system rather than Individual wells/boreholes or decentralized waste water management systems.*

7.19. Lagos State Universal Basic Education Board

- a. *Ensure the provision and/or rehabilitation of appropriate water and adequate sanitation facilities in all public Schools.*
- b. *Promote Water and Sanitation education in primary and secondary schools.*
- c. *Develop educational materials on sanitation and hygiene for public enlightenment*

7.20. Ministry of Justice

Assist in translating the Policy framework into Legal instruments.

7.21 Ministry of Information

Educate the public on water efficiency, waste management, and safe hygiene practices.

7.22. Lagos State Drug Quality Control Laboratory (LSDQCL)

- a. *Enforce the Nigerian Standard for Drinking Water Quality.*
- b. *Develop Drinking Water Quality Surveillance and enforcement strategy, communicate drinking water quality data to stakeholders and consumers, and establish state priorities for drinking water quality surveillance.*
- c. *Validate Water Safety Plans of service providers.*

7.23. Development partners

- a. *Fund water and sanitation sector projects.*
- b. *Assist in building the capacity of sector players including CSOs, WASHCOMs, LGA/LCDA officials*
- c. *Mobilise resources to develop the sector.*
- d. *Monitor and evaluate WSS projects and programmes.*

7.24. Non-Governmental Organizations (NGOs)

- a. *Embark on Advocacy campaigns to ensure sustainable development of the WSS sector.*

- b. Mobilise communities to participate in WSS programmes.
- c. Implement programmes to promote safe sanitation practices by communities.
- d. Assist in building the capacity of sector players including CDAs, WASHCOMs and LGA/LCDA officials
- e. Implement WSS programmes and projects.
- b. Mobilise resources to develop the sector.
- c. Mobilise citizens towards prompt payments of tariffs.
- d. Embark on Budget tracking and reporting for accountability and transparency.
- f. Partner with the Utilities to implement WSS programmes through consulting and/or contracting services.

7.25. Private sector

- a. Provide water supply and sanitation services.
- b. Finance water supply and sanitation infrastructure development through loans and grants.
- c. Mobilise capital investment for the construction of water works, dams, waste water and sanitation facilities.
- d. Conduct studies for the development of the water and sanitation sector.
- e. Implement services for water supply and sanitation agencies/utilities including:
 - i. Construction, management and maintenance of water supply systems and facilities.
 - ii. Construction, management and maintenance of sanitation systems and facilities.
 - iii. Execution of WSS contracts and consultancies.
 - iv. Collection of WSS tariffs.
 - v. Provision of alternative sources of power supply for water supply and sanitation schemes.

7.26. Lagos State Water Court

- a. Investigate and adjudicate on all complaints and disputes concerning the water and sanitation sector.
- b. Determine all matters referred to it for consideration.
- c. Sit on all appeals from the determinations and rulings of the Water Regulatory Commission.
- d. Summon any person to give evidence before it.
- e. Make any ruling as may be expedient.
- f. Make its rules of procedure.