

**IMPLEMENTING SUSTAINABLE DEVELOPMENT GOAL 6 IN NIGERIA: A STUDY OF
ADO/ODO OTA LOCAL GOVERNMENT AREA IN OGUN STATE (2015 – 2019)**

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ABSTRACT

The study examines the implementation of sustainable development goal 6 which is about ensuring universal access to clean water, sanitation and hygiene for all. Specifically, this study explains the challenges of implementing SDG 6 in Ado/Odo Ota Local Government Area in Ogun State. It looks at the importance of clean water, sanitation and hygiene in Nigeria and the LGA. Using both the quantitative and qualitative method of data collection, it studies the WASH policy and laws in Nigeria. It adopted the development theory and establishes the link between the importance of Goal 6 and sustainable development. The data for this work were gathered from both primary and the secondary sources. Structured interviews were also conducted with experts in this field. The content analysis technique was used to analyze the data gotten from the secondary source while the SPSS statistical tool was used to analyze the primary data. The findings revealed that universal access to clean water, sanitation and hygiene for all has not been fully implemented in in this locality. It also discovers that there is no development plan for the water sector hence the difficulty in implementation. Therefore, the study recommends that the government should review the existing water polices, end open defecation and ensure effective institutions. Also, there should be massive sensitization and advocacy of the residents in Ado/Odo Ota Local Government Area in Ogun State.

Keyword: Water, Sanitation, Hygiene, Sustainability, Development

1.1. Background to the Study

Availability and accessibility of safe water and sanitation for all are very central to any nation's pursuit of development. This is because it has significant health and economic benefits to households and individuals (ChildInfo/UNICEF, 2013). According to Longe and Omole (2012), the state of human health has inexplicably been linked with a series of water-associated conditions: safe drinking water, adequate sanitation, reduced burden as a result of certain water-related disease, and healthy freshwater surroundings. In 2015, members of the United Nations (UN) decided on the Sustainable Development Goals (SDGs). The reason of these goals is uniting the nations of the world for the common purpose of guaranteeing the general wellbeing of the people until the year 2030. These 17 goals consist of mechanisms that have been put in place in ensuring an end to poverty, dealing with climate change, and conserving resources. Hence, SDG 6 is centered on making sure that there is Universal access to the clean, potable, and stable water supply as well as sanitary services and Hygiene for everyone by the year 2030. This goal is a response to the fact that millions of people across the globe do not have access to these basic amenities. It is projected that about 40 percent of the populace in the world is affected by the shortage of Water, Sanitary, and Hygiene services.

Although, this percentage is projected to surge based on the consequences of the spike in global temperature. Poor countries are the worst hit by this lack or inadequacy as they experience drought, famine, and malnutrition (Markus et Nicole, 2015).

The socio-economic importance of water has been stressed by different scholars and experts in the past. This premise is founded that water defines quality of life of a person as well as a country's economy. It plays actual role in every facet of the economy ranging from; health sector, food production, security, energy, industry, environmental sustainability, just to mention a few. Therefore, the economic wealth of Nigeria for example depends greatly on her use and the management of the country's water resources. Additionally, water is key to the economic growth areas of a country. It greatly impacts employment, creation of jobs, and a country's Gross Domestic Product (GDP), even though it is susceptible to environmental changes (Oladipo, 2017).

In 2002, the drive for the start of The Millennium Development Goals (MDGs) commenced and continued until 2015. Its greatest target was to put an end to extreme poverty (United Nations, 2017). This MDGs drive, which was accepted by 189 members of the United Nations, set apart eight developmental goals (World Health Organization, 2017a). One of the objectives as listed in Target 7c was targeted at halving the number of individuals lacking sustainable access to safe water and basic sanitation, as well as hygiene. This goal existed until 2006 when it was finally accepted by the members of the United Nations.

The Millennium Development Goals were replaced by the Sustainable Development Goals (SDGs) for the 2016 – 2030 duration. The (SDGs) is a result of the United Nations Conference on Sustainable Development that ensued in Rio de Janeiro in 2012. This consultation aimed to deliver a lot of all-inclusive goals that will meet the emerging ecological, political, and economic difficulties presently challenging the world. The SDGs replaced the Millennium Development Goals (MDGs) which began after an international call to action in the year 2000 to deal with the shame and embarrassment associated with poverty. The MDGs set up quantifiable, globally accepted mechanisms in dealing with extreme poverty and hunger, preventing the spread of deadly diseases and ailments, increasing primary education to all children amongst other important and urgent global concerns (Weststrate et al, 2019).

Connection to safe and potable water and sanitary services is very vital in preventing diseases. For instance, diarrheal ailments are one of the leading causes of approximately 2 million deaths in humans, including 360,000 kids younger than the age of five, majorly in poor income earning /salary nations. The projected figure is about 58% of diarrheal ailments can be associated with unclean water source, sanitation, and hygiene (WHO, 2017b).

As per fears of the extensive participation of water in development, the International Law Association (2004) showed that water and wastewater facilities are "very important human necessities" of people. In the international setting, approximately 0.8 billion persons presently want connection to safe water while about 2.5 billion people are short of suitable hygiene facilities. Furthermore, about one billion people engage in open defecation. Owing to the acknowledgment of the significance of water and sanitation, national and international policies, agreements, goals, etc. were created. The results of these numerous international meetings and conferences on health, water, and sanitation produced co-operations and collaborations between international organizations and nations to give improved means of getting water, provision for technical assistance to governments, monitoring, etc. For instance, there is a global WHO and UNEP Program Network for air and water quality observing which is operational in about 60 nations. Surface and groundwater quality is checked in around 400 urban communities around the world (WHO/UNEP, 2017).

Consequently, the Sustainable Development Goals (SDGs) are another UN joint effort to manage water quality and sanitation issues around the world. Following the 2017 report on the Advancement on Drinking Water, Sanitary services, and Hygiene, an update on The Sustainable Development Goal Baseline, was one of the fallouts of a Joint Monitoring Program, (JMP) of the two organizations. It introduced the international evaluation of "safely managed" domestic water and sanitary facilities with overruling assumption that a lot of individuals still lacked access to safe water, especially in rural parts. A large majority of Nigerians fall

into one of the two classifications of those wanting connection to safe, accessible water in their homes and access to safe sanitation facilities (Akanwa and Okonkwo, 2013).

It was just after the establishment of the Federal Ministry of Water Resources and the 11 River basin Development Authorities in 1976 that the Federal Government became interested in water resources and administration. Although, there has been the provision of large sums in form of loans and grants by various international organizations such as; United Nations Children Fund, World Bank, ADB, UNDP, and a few other bilateral, multilateral, and support organizations that are likewise involved in making sure that there is universal access to water supply and sanitary services in Nigeria. Currently, no superior Law or Government Institution is controlling the water sector in Nigeria. Presently, events in the water sector are being controlled by the Federal Ministry of Water Resources at the Federal Level and the State Water Board at the State Level (the Federal Republic of Nigeria, 2000; African Development Bank/Organization of Economic Development, 2007).

Besides, the organization structure of the water sector in Nigeria indicates numerous offices as water supply policy workers. A number of these offices comprise; the Federal Ministry of Agriculture, Water Resources and Rural Development Agency, National Council on Water Resources, River Basin Development Authorities, and the State Water Agencies. The main obligations of the Water Resources and Rural Development Agency are the designing of guidelines, gathering of data, coordination, and observing water resources improvements at the national level. The River Basin Development Authorities function at the Federal level while water boards or water corporations work at the state level as state water supply offices (Oyebande, 1993).

1.2 Statement of the Problem

The lack of water impedes development by limiting the production of food, health, and the growth and development of industries. The New Partnership for African Development (NEPAD) indicated in a 2006 report, that the fundamental problems in Africa are; funding potential development of water resources, significantly reducing the people that do not have connection to drinkable water and sanitary services, making sure that there is adequate food by increasing the area of irrigation and guarding economic gains through development by effective drought and flood management as well as desertification.

For instance, in eliminating insufficiency and food shortage, it is essential that there is just and unbiased connection to basic means of support including land and water and for household and industrial purposes (UN-Water, 2006). This involves the percentage of the population with economical connection to an upgraded water means both in the city and village areas. It was also perceived that the shortcomings of these institutions and in some instances the lack of proper policy instruments were the key issues that obstructed Nigeria from actualizing the Millennium Development Goals (Guio-Torres, 2006; Water Aid, 2006).

The Nigerian government drafted a national water supply strategy, with the objective of ensuring sufficient connection to safe water by all by 2030. This strategy goal or course of action is for every Nigerian to have sufficient connection to acceptable, reasonable, and sustainable sanitation through the enthusiastic participation of the Federal, State, and Local Governments, Non-Governmental Organizations (NGOs), Development Partners, Private sector, Communities, Households, and Individuals (the Federal Republic of Nigeria, 2000; WSMP, 2008).

Therefore, safe drinking water and sanitary facilities mean drinking water that is free from all forms of contamination and is accessible for different purposes including the treatment and safe discarding of human excreta. The World Health Organization (WHO) characterized potable (quality) drinking as water that has been consumed over a while and has no health-related risk involved, including various sensitivities or changes that may happen between life stages (WHO, 2006). A distinguishable quality of potable drinking water is what is visually acceptable and doesn't contain pathogens and unsafe chemical bodies or elements (WHO, 2006; Park, 2005; and NSDWQ, 2007). Accessible domestic-water and adequate sanitary provision

are very key to the wellbeing of individuals. This is because it contributes to health, livelihood, and creates a very healthy environment for progress (Euler et al., 2001; von Hauff and Lens 2001; SEI/UNDP 2006). Alao & Garrett (2019) further elucidate that insufficient access to quality WASH services can have major adverse effects on people's general wellbeing and enormous socioeconomic consequences for society. Unclean drinking water and unhygienic surroundings escalate the people's susceptibility to water-related diseases as well as diarrheal sicknesses, which continue to pose a very severe risk to a lot of Nigerians. The shortage of decent WASH services is also connected to malnutrition, poor growth, and poor educational achievement amongst developing children. It adds to economic losses and causes severe damage to the environment.

Also, water is crucial for the normal physiological function of plants and animals (Guyton and Hall, 1996). Regardless of its significance in the sustenance of employment, when it is inaccessible or limited, it turns into the significant reason for the high spread of diseases and leading increase in death rates on the premise that it is constrained in terms of accessibility and quality (Andrew, 1998 and Population Reports, 1992). As a result of the above, this study does not just investigate the lack of implementation of SDG 6 in the LGA, it looks at the effort and challenges in ensuring universal access to clean and reasonably priced water and sanitary services. It will further expound on the failure of previous and past governments in addressing the implementation of Universal access to safe and reasonably priced water and sanitary services in Ado Odo/Ota, Local Government Area in Ogun State. It further recommends ways through which the government, NGOs, INGOs, Public office holders, etc. can tackle this issue that may arise in the process of implementation. Furthermore, it will take a cursory look at the extent to which SDG (6) has been implemented and the key issues and challenges faced. Hence, this work will give an improved understanding of the impact of SDG (6) in Ado- Odo/ Ota, Local Government Area in Ogun State.

1.3 Research Questions

1. How has the implementation of SDG (6) improved the universal access to Safe Water and sanitary services in Ado- Odo/Ota Local Government Area in Ogun State?
2. To what extent has Goal (6) been implemented in this local government area?
3. What are the challenges in implementing Universal access to safe and Water and Sanitation in Ado- Odo/Ota, Local Government Area in Ogun State?
4. What are the solutions in ensuring implementation of the Universal access to safe and affordable Water and Sanitation in Ado-Odo, Ota Local Government Area in Ogun State?

1.4 Objectives of the Study

The research objectives included the following;

1. To examine how the implementation of SDG (6) has significantly improved the access to safe and affordable Water and Sanitation in Ado – Odo/Ota, Local Government Area in Ogun State.
2. To investigate the extent to which the Universal access to safe and affordable Water and Sanitation has been implemented in Ado – Odo/Ota, Local Government Area in Ogun State.
3. To assess the challenges in implementing Universal Access to safe and affordable Water and Sanitation in Ado –Odo/Ota, Local Government Area of Ogun State.
4. To proffer solutions to the challenges of the implementation of the Universal Access to safe and affordable Water and Sanitation in Ado – Odo/Ota, Local Government Area of Ogun State.

1.5 Research Propositions

The study answered the following propositions in other to fully achieve the objectives of the study:

H1 Implementation of SDG (6) has not significantly improved the Universal Access to Safe Water and Sanitation in Ado-Odo/Ota Local Government Area of Ogun State.

H2 The Universal Access to Safe Water and Sanitation has not been implemented in Ado – Odo/Ota Local Government Area in Ogun State.

H3 Inability to access finance is not a significant hindrance in the implementation of Universal Access to Safe Water and Sanitation in Ado – Odo/Ota Local Government Area in Ogun State.

1.6 Significance of the Study

This research will have both experimental and theoretical significance. The Experimental significance will be hinged on the premise that government bodies and agencies, Legislators, Water Sanitation and Hygiene advocates, NGOs, and Donor Agencies will design and implement programs that will improve the widespread connection to safe and reasonably priced Water and sanitary services in Ado – Odo/Ota Local Government Area in Ogun State. With findings from this work, it will contribute tremendously to the existing body of knowledge and will function as a catalyst that will change the perception and attitudes people have about Water, Sanitation, and Hygiene. Second, the results from these findings may further encourage a review of the existing water laws and policies to adequately fit into the vision 2030 of Agenda 6 of the Sustainable Development Goal. This will be of great benefit to professionals in the WASH Sector, NGOs, INGOs, WASH Advocates, Federal and State government officials, international organizations, etc. Third, this study will look at how the SDG (6) has been domesticated in Ado-Odo/Ota, Local Government Area in Ogun State hence advocating for further review and better implementation.

The theoretical significance of this research will take a study on the impact of Implementing SDG (6) on Ado-Odo/Ota, Local Government Area of Ogun State.

1.7 Scope of the Study

There is a need to take an in-depth study on the Water, Sanitation, and Hygiene sector in Ado- Odo/Ota Local Government Area of Ogun State. This will be concerning implementing SDG (6) in this local government area. Hence, the scope of this research will analyze the challenges of implementation, issues arising, and the associated impact of implementing the SDG (6) in the Ado – Odo Local Government Area in Ogun State (2015 – 2019).

1.8 Outline of the Study

This research work is made up of five chapters. Chapter one deals on the introductory aspect of the research work and elaborates on the following: Background to the Study, Statement of the Problem, Research propositions, Objectives of the Study, Research Hypotheses, Significance of the Study, Scope, and Limitations of the Study and the Outline of the Study.

Chapter Two will focus on Literature Review and Theoretical Framework. Furthermore, it looks at the Water, Sanitation, and Hygiene Sector in Nigeria and goes deeper into the history of the water sector in Nigeria, Water profile, Water laws and policies in Nigeria, Water and development, and the challenges in the WASH sector in Nigeria.

Chapter three covers the Research methodology, Sources of data, Method of Data Collection, Techniques of Data, and Sample Size.

The research methodology includes interviews, questionnaires, and findings from the internet, magazines, books, and journals.

Chapter four will deal on Results

Chapter five provides an analysis of the data collated from this field study.

Chapter six consists of the summary, recommendations, conclusion, and the contribution to knowledge which will be based on the findings from this study.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter will review various work of scholars on Millennium Development Goals, Transition to the Sustainable Development Goals, An Assessment of MDG 7C and SDG 6 in Nigeria, Water, Sanitation and Hygiene reports from selected countries around the world including Nigeria, Water laws, and Policies in Nigeria, challenges in the WASH sector in Nigeria, just to mention a few.

2.1 Summary of the Millennium Development Goals

The United Nations held Millennium Assembly from 6-8 September, 2000 and embraced the Millennium Declaration which underscored the requirement for a global commitment towards emerging nations. The Millennium Declaration is an exceptionally thorough manuscript, which brought forth the MDGs (Prammer and Martinuzzi, 2013).

The MDGs comprise of 8 fundamental objectives, 21 targets and 43 yardsticks. The MDG structure has its inception in a long-standing UN convention of defining objectives to be accomplished universally or the objectives for the 'water decade' of the 1980s (Manning, 2009). The foundation to the acceptance of the MDGs is unpredictable and fascinating. The idea for the MDGs was, on a fundamental level, created during the 1990s (Prammer and Martinuzzi, 2013).

The greater part of the MDGs had its roots in the sequence of important UN sectorally concentrated consultations from 1990 (Jomtien Conference on Education) to 1995 (World Summit on Social Development, Copenhagen), and were put in unison constantly by cycle at the OECD Development Assistance Committee in 1995/96, which, thusly, prompted their incorporation in the Millennium Declaration at the UNGA in 2000 (Manning, 2009).

The Millennium Declaration was presently managing issues that are far more extensive than the last MDGs. As per Bardy et al. (2012), it includes environmental contamination, a global warming, child labour, human right violations and the weakening of social principles (professional stability and the battle against corruption). This is a quality of the MDGs as they involve worldwide objectives with a need to accomplish them on a worldwide level. At first, the fundamental point of the MDGs was to address the necessities of the most unfortunate of poor people, dwelling at all emerging countries (LDCs), Land-locked emerging nations (LLDCs) and little island creating nations (SIDCs) (United Nations, 2003).

Vandemoortele (2011) contends that the MDGs were intended to widen the advancement account past the tight development worldview. Nonetheless, the MDGs have not had the option to accomplish this for all social orders. In spite of the fact that the MDGs are not completely satisfied, as certain nations are as yet lingering behind, similar to sub-Sahara Africa, one can feature that they have an incontestable quality (Prammer and Martinuzzi, 2013). As Vandemoortle (2011) asserts, the MDGs have stirred political responsibility as at no other time. As the Millennium Development Goals (MDGs) were the world's major potential on advancement; a promise to decrease poverty and human lack round the world at an unparalleled and unique time (Hulme, 2009). This was meant to be accomplished through concerted acts and agreements throughout the world. There were eight global goals to be accomplished by 2015. These goals center on poverty, hunger, maternal and child death, contagious and transmittable diseases, education, gender disparity, environmental damage, and global alliances. The eight goals established by the United Nations include Universal primary education, gender fairness, eradication of poverty, women empowerment, enhanced maternal health, reduction of child death, providing solutions to diseases such as HIV/AIDS, malaria, etc. develop global alliances for development and ensure environmental management (Hulme, 2009).

Todaro and Smith (2011) stress that the MDGs were accepted and acknowledged by 189 countries which remain the members of the United Nations inclusive of Nigeria. This was intended to ensure that there is the

provision of sustainable and lasting resolutions to developmental issues in Nigeria. The MDGs assisted Nigeria with safeguarding and guaranteeing the wellbeing of people, sustaining goods, promoting economic and social selections, etc.

McArthur (2014) argues that the Millennium Development Goals stood recognized in confronting leading challenges facing the globe as they looked in the year 2000. The MDGs stirred answers to question to challenge universal developmental matters and created a way for a new course of action for international development. Some of the accomplishments of the MDGs consist of providing keys to get rid of poverty, improvement of women's education, and unhindered connection to clean water and better medical services.

Nevertheless, inadequacies which was exposed by MDGs led to the rise of the SDGs. The 17 goals of the SDGs are to be considered as transformational. This is because they are to be achieved through a plan that will represent the people, the planet, and the prosperity of society. They include; zero hunger, no poverty, good health, healthy water and good sanitary services, gender equality, quality education, inexpensive and clean energy, decent work and economic growth, industry, innovation and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below, life on land, peace, justice and strong institutions, partnership for the goals.

2.2 Progression to Sustainable Development Goals from Millennium Development Goals

The Millennium Development Goals (MDGs) paved way for the SDGs. They were specific and determined, hence, making it eye-catching (Easterly 2015). With eight distinct MDGs, the ultimatum for data was inadequate and restricted. Even at that, the absence of dependable data hindered the unreported thereby making it undetectable to the policymakers. A case in point, in the MDG pointers, only three African countries have numbers on all pointers (United Nations 2014). Compared to the MDGs, the 17 SDGs (169 sub-objectives) constitute very daunting task. In March 2016, the UN Statistical Commission embraced a list of 230 yardsticks recommended by the Inter-Agency and Expert Group on SDG Indicators. This was a harsh disparity to the 60 universally coordinated indicators for the MDGs. (R. Bali Swain and F. Yang-Wallentin 2019).

The above led to the meeting held in September 2000, where leaders around the globe from about 189 nations, including 149 Heads of government, convened at the United Nations General Assembly to deliberate on various difficulties emerging. World leaders accepted a mutual Millennium Pronouncement, which laid out the vision for all-encompassing and sustainable Innovation (UN 2000 (A/RES/55/2)). These world influencers vowed to put in the effort needed in making sure that environments of adverse insufficiency were eliminated anywhere they occurred. They recognized that although, main obligation in eliminating scarcity rests on the individual governments, working as a team, they can fight against the disease of poverty that has plagued the human race (Nicholas, 2017).

As a result of the ratification of the Millennium Declaration in 2000, member states of the UN decided to create a conducive environment at the international level that reinforced the achievements of the MDGs. These MDGs have played significant roles in development, for instance organizing political support, directing and expanding relief, loan, grants, consideration to the reduction of poverty, and improving synchronization and synergy amongst actors in development (UNU and UNOSD 2013). The UN member states decided at the Rio Conference that concerns about the post-2015 agenda encompassed finishing uncompleted businesses of the MDGs and making sure that progress is made in the direction of achieving the sustainable development goals (UN General Assembly 2012).

This enterprising and grand agenda is now being called the SDGs which is a fall out that the MDGs needed major changes in terms of the policies and outlook. In assessing how effective and comprehensive the SDGs are vis-a-vis the post-2015 agenda, there is a need to come to terms with the changes and the progression from the MDGs to the SDGs concerning the targets and vision. The procedure of increasing the new post-

2015 agenda, and principally the SDGs, builds on an acknowledgement that a dissimilar method was taken to adequately cater to the challenges of the future.

The Communiqué released by the Rio Conclusion Report, *The Future We Want* (UN General Assembly 2012), reveals several objectives and requirements that will guide the SDG discussions. They consist of goals that encompass the guidelines of sustainable development and the policies and programs of nations, reversing the loss of environmental resources, decreasing the loss of biodiversity, unrestricted connection to healthy domestic water and basic sanitary services, and improving the lives of people that live in the slums. The goals of the SDGs involve different targets to conserve and preserve the environment (majorly SDG 6, 7, 14, and 15) while the others deal on the following; an end to all kinds of poverty, hunger, food sufficiency and availability, better nutrition, and promotion of sustainable agriculture, safeguard healthy lives and promote good welfare of all individuals irrespective of age, promote all-encompassing and fair access to good education and ensure lifetime learning prospects. Attain gender fairness as well as allowing all females, whether young or old to reach their full potential. Guarantee the accessibility and sustainable management of water and good sanitary services for everyone. Safeguard connection to reasonably priced, dependable, justifiable, and modern energy access. Encourage continued, complete, and sustainable economic growth, full and useful employment, and decent work for all. Construct strong systems, encourage an all-encompassing and sustainable industrialization, and encourage invention. Lessen discrimination between and among countries. Ensure cities and human habitants are all-encompassing, decent. Guarantee sustainable consumption and invention form. Take the necessary step to fight against climate change and its effects. Safe and sustainable use the water bodies such as the oceans, seas for sustainability. Guard and encourage the moderate use of land ecosystems, sustainable management of the forests, fight against desertification, stop and undo land degradation, and end biodiversity loss. Encourage the nonviolent and complete world for sustainability, ensure unhindered entrance to justice by all and ensure responsible, responsive, and complete societies at all levels. Reinforce need for execution and revive international alliances for sustainable development (UN General Assembly 2014; UN Statistics Division 2008).

The SDGs are indeed a very glaring disparity when compared with the MDGs - the Sustainable Development Goals (SDGs) are consistently related to every nation globally, eliminating “emerging” and “advanced” divide that has left the MDGs susceptible to a lot of condemnation. While there may be semblances regarding the setup of the MDGs and the SDGs – e.g. to each outlined according to base on the plan for international development for 15 years, the SDGs have essentially lengthened the gauge and plans of the MDGs. Also, the SDGs are fixated on universal development, sustainability and establish a grasp that the global setting is not an addition or opposed to sustainable development, but on the premise, it fundamentally and reinforces all other goals. Even though the MDGs sustained reflective and thin attention on poverty decline, the SDGs on the other hand embrace an innovative ideology and thought. This is reflecting as a method that views the milieu, economy, and the world as a fixed structure instead of as distinct and opposing “leaders”: e.g. urban areas, water and sanitation, energy, and climate change are all conspicuously highlighted. Additional noteworthy change amongst the MDGs and SDGs is how both were shaped. Making the SDGs has been viewed as unmatched and collaborative policy procedure linking entities from all spheres of life as well as global governments. This is fully mirrored in their gauge and desire (Woodbridge, 2015).

2.3 Report of MDG 7c in Nigeria and Selected Countries

Different reports reveal that Nigeria seemed to have made a substantial achievement in the accomplishment of the MDGs, However, about 90% of the targets were majorly not actualized. Thus, the country cannot be said to have made substantial progress in the status of the realization of the MDGs. This leaves an enormous gap and something which with to straighten out the imminent policy drive towards further fulfillment of the SDGs (Shobowale et al, 2017).

Furthermore, the 2014 update to the UNICEF/WHO as well as the 2015 Joint Monitoring Programme (JMP) on Progress on Drinking Water and Sanitation, illustrates that significant improvement has not been achieved in unhindered connection of urban areas in Nigeria to sufficient water means. The report shows that it just changed from 78% in 1990 to 79% in 2012. Though, these facts do not indicate if those connections are

direct beneficiaries of the State Water Agency (SWA) network. The JMP records also discovered a substantial decline in the amount of families with access to pipe-borne water to their various households. The report shows that it fell from 33% in 1990 to 6% in 2012. This state according to Akpabio (2012), signifies major and overall health question that needs to be tackled since its outlook is in terms of the accompanying after effect that the lack of safe water drinking access causes.

Despite the plans of the different administration at all levels, the water supply areas in Nigeria is insufficient. Causes of this decline is the massive socioeconomic degree of development and explosive population increase in Nigeria, which extremely exceeds the level of water supply development. Other reasons discovered (FMWR 2000) are absence of suitable managing of the country's water resources, and low level of investment in repairs and running the schemes, which accounts for a rapid breakdown of the production services.

A case in point, about 80 percent of those resident in the villages lack connection to a safe water supply arrangement. These cities and towns record only about 42% of the residents that have access safe water supplies (FMWR 2000). The remaining people is mandated to source for personal water supplies from other means (wells, boreholes, streams, rainwater, etc.) for which quality is difficult ascertained (Ohwo, 2011).

7c of the MDG was designed to halve the amount of people living with no sustainable connection to healthy and drinkable water and basic sanitary services, plus hygiene. This goal was continuously modified pending its ratification and adoption in 2006. Drinkable water and sanitary use remain a very vital key to disease prevention. Diarrheal diseases for instance account for the loss of about 1.5 million people annually, consisting of 360,000 children below five years, mainly from poor-income nations. The projection of 58% of diarrhea illnesses can be ascribed to unhealthy water supply, sanitation, and hygiene (WHO 2017b).

Furthermore, MDG 7c was one of the initial MDG goals to be actualized well ahead of the deadline. According to Westrate (2019), the report released by the UNICEF and WHO from 1990 and 2010 indicates that well over 2 billion people got connection to enhanced drinking water means, and by the end of 2010, 89% of the global population (6.1 billion people) used better water. These numbers indicate that in 2015, only about 8% of the global population will be deprived of safe domestic water. Hence, there is need for MDG 7c to be acknowledged around the globe.

The progress report on MDG 7c was evaluated by the WHO and UNICEF alongside that of the Joint Monitoring Programme on Water Supply and Sanitary Services (JMP). JMP evaluates unhindered connection based on 'improved and unimproved water means as well as 'improved and unimproved' sanitation facilities as the value to be measured for safe water and basic sanitary access. Appraisals are centered on survey data, involving Demographic and Health Surveys (DHS), UNICEF Multiple-Indicator Cluster Surveys (MICS), World Bank Living Standards Measurement Surveys (LSMS), WHO World Health Surveys (WHS), and national censuses and surveys (Westrate, 2019 cited in Bartram et al. 2014; Cotton and Bartram 2008).

The growth made throughout the MDGs is very notable. According to JMP statistics, the goals established for connection to healthy domestic water were met in 2010, five years before the time limit (United Nations MDG Monitor 2017). By 1990 and 2015, 2.6 billion people had unhindered connection to 'improved' drinking water sources, and 2.1 billion people had connection to 'improved' sanitation. The amount of individuals involved in exposed excretion has reduced by approximately 50 percent from 1990.

According to the World Health Organization (WHO)/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation, this objective was met in 2010. The goal attainment was extremely motivated as a result of significant and highly populated countries such as China and India, with Sub-Saharan Africa (SSA) behind the other countries. This is according to the progress report on the Millennium Development Goals (MDG) Evaluation on Drinking Water, (1990–2015) indicates that sub-Saharan Africa did not meet the MDG goal because over 663 million people needed better domestic water means in 2015. Furthermore, about 91 percent of the all population were confirmed to be using an

upgraded domestic water supply scheme, such as pipe-borne water, boreholes, covered wells, and springs or rainwater. (Westrate, 2019).

Drinkable water is compromised in the Sub Saharan region. The locale is drenched with nonstop, endemic water and disinfection emergency which further incapacitates and slaughters terrific amounts of individuals, compromises the security of the workforce, disrupts the general flow of commercial activities, and limits entry to learning and life prospects. Annually, an expected 1,000,000 Africans pass on from maladies identified with dangerous drinking water, pitiable sanitation, and hygiene. Wellbeing, self-pride, and personal advancement are in question – for many different Africans and Africa. Of the 962 million Africans, just 602 million (60.2 %) had upgraded drinkable water sources and 360 million (36 %) had enhanced sanitary facilities during the 2000s. Just 15 million Africans (1.6 %) picked up yearly admittance to developed domestic water means, while 10 million (1 %) picked up admittance every year to improved sanitation services (Willem Alexander, 2008).

Hence, 7c of Millennium Development Goal (MDG) looks to divide by 2015 the extent of individuals deprived of reasonable admittance to healthy domestic water and sanitary services. In meeting the objective, Africa expected to have been giving every year from 2008 to 2015 admittance to upgraded domestic water means to 33 million individuals (3.43 %) and upgraded disinfection offices for 45 million individuals (4.68 %) (Willem Alexander, 2008). Earthwatch (2009) postulates that roughly 5.7 million South Africans needed connection to essential water facilities and 18 million had no essential sanitary services in the last part of the 2000s. Eneh (2005) detailed that merely 54 % Nigerians approached safe drinking water and 53 % approached sufficient sanitary services in 1999. Statistics were worse at 48 % and 44 % individually for village parts, which inhabitants more than 70 % of the residents (FGN, 2004). Mdoe and Buchweishaija (2009) announced that equally external and concealed waters in Dar es Salaam, Tanzania were unsafe whenever sourced crude, also in enormous measure.

The 2008 report by Transparency International and Water Integrity Network bemoaned the vices in the WASH sector places the lives and occupations of a huge number of individuals in danger. Easing the pace of progress and struggles to limit scarcity and want. Water exploitation could accept numerous structures with different impacts. For instance, an absence of reliability increases the fundamental expense of setting up. It powers residents to offer incentives to have connection to water networks. This redirects water expected used to farm away from helpless towns, which can be utilized for horticulture to haul themselves out for survival. Exploitation permits the unloading of toxins in or near water bodies. Distorted meter taking/recordings, rash obtainment of costly yet ineffectively built offices, and purchased directorships all neutralize feasible sustaining of water.

Recent reports show that water-related ailments cause deaths of about 5 million individuals consistently. Around the world, one billion individuals can't get water inside a 15-minute stroll out from their households. Indeed, this 21st century, about one-sixth of the total populace (1.1 billion persons) were not connected to an enhanced water source and two-fifths (2.4 billion individuals) needed connection to an upgraded sanitary services. Most of the individuals live in Asia and Africa, where less than one portion of all Asians easily use upgraded sanitary services and two-fifth of all Africans need enhanced water means. In the period 1990-2000, the extent of the total populace that have connection to feces removal services expanded from 2.9 billion to 3.6 billion individuals (or 55 % to 60 %). It was conceivable through expanding the level of individuals presented with certain types of enhanced water from 4.1 billion (or 79 %) in 1990 to 4.9 billion (or 82%) in 2000 (Eneh, 2011).

The African Development Bank (2007) presented pointers on the level of Africans with connections to drinkable water in 2004 (see Table 2.1). From the presented information, just 22 % of Ethiopians were connected to safe water, 42 % of the number of people in Chad connected to drinkable water, and 43 % of the number of people in Angola easily had connection.

Table 2.1: Africans with connection to suitable water (2004 cited in Eneh, 2014)

S/n	Country	% People with connection to drinking water
1	Algeria	85
2	Angola	53
3	Benin	67
4	Botswana	95
5	Burkina Faso	61
6	Burundi	79
7	Cameroun	66
8	Cape Verde	80
9	The central African Republic	75
10	Chad	42
11	Comoros	86
12	Congo	58
13	Congo Dem. Rep.	46
14	Cote d'Ivoire	84
15	Djibouti	73
16	Egypt	98
17	Eritrea	60
18	Ethiopia	22
19	Gabon	87.9
20	The Gambia	82
21	Ghana	75
22	Guinea	50
23	Guinea Bissau	59
24	Guinea Equatorial	43
25	Kenya	61
26	Lesotho	79
27	Liberia	62
28	Libya	72
29	Madagascar	50
30	Malawi	73
31	Mali	50
32	Mauritania	53
33	Mauritius	100
34	Morocco	81
36	Mozambique	43
36	Namibia	87
37	Niger	46
38	Nigeria	48
39	Rwanda	74
40	Sao Tome/Principe	79
41	Senegal	76
42	Seychelles	88
43	Sierra Leone	57
44	Somalia	29
45	South Africa	88
46	Sudan	70
47	Swaziland	62

48	Tanzania	62
49	Togo	52
50	Tunisia	93
51	Uganda	60
52	Zambia	58
53	Zimbabwe	81
Africa		62

According to the indicators, just 4 African nations (Botswana, Egypt, Mauritius, and Tunisia) had 91-100 % of the people with a connection to drinking water. 10 nations (Algeria, Comoros, Cote d'Ivoire, Gabon, Gambia, Morocco, Namibia, Seychelles, South Africa, and Zimbabwe) had 81-90 % of their populace with connection to drinking water. 11 of them (Burundi, Cape Verde, Central African Republic, Djibouti, Ghana, Lesotho, Libya, Malawi, Rwanda, Sao Tome, and Principe and Senegal) had 71-80 % of their populace with connection to domestic water. 7 African nations (Benin, Burkina Faso, Cameroun, Liberia, Sudan, Swaziland, and Tanzania) had 61-70 % off with connection to household water. 9 (Angola, Congo, Eritrea, Guinea Bissau, Kenya, Mauritania, Sierra Leone, Uganda, and Zambia) had 51-60 % of their populace with connection to drinking water. Six nations (Chad, Congo Democratic Republic, Guinea Equatorial, Mozambique, Niger, and Nigeria) had 41-50 % of their populace with connection to drinking water. 2 of them (Ethiopia and Somalia) had 21-30 % of their populace with a connection to drinking water. In this way, as many as 8 of the 53 African nations (15.1 %) had under 50 % of the population with connections to household water in 2004 (Eneh et al, 2014).

Approximately 95 percent of the hydropower potentials in Africa is untapped. Using this means will generate food by adequate storing capability to increase well-watered farming land several times over. Connection to water is essential in assisting the African countries with circumventing debasing impacts of poverty, lack, and want, to give them a prospect and to propel advancement of the African region [Willem –Alexander cited in Eneh, 2014]. For their homegrown needs, numerous Africans weakly count on polluted water sources since they can't manage the cost of the significant expense of water treatment. Furthermore, over the household needs, there is a normal conviction that water isn't sufficiently contaminated to be deadly. Consequently, illiteracy has an influence here. The subsequent water-related issues comprise of premature deliveries, birth deserts, and infant wellbeing challenges, for example, methemoglobinemia (Blue infant disorder), drying out, and hunger. Other health challenges borne by kids because of water emergency are forfeiture of work and school days proportional to 3-5 percent of GDP, death of guardians to increased maternal death rate (MMR), and sanitary associated poor life probability, which beset kids, prompting high death rate and dreariness of babies and children that are under-five years (AfDB, 2007a).

The African Development Bank announced that the maternal death rate was larger than 100 for each 1,000 for seventeen nations in Africa, somewhere in the range of 11 and 99 for every 1,000 for 35 African nations, and not one of the nations had not exactly or equivalent to 9 for every 1,000. Normal MMR was 84 for every 1000 for African nations in 2006. Sixteen African nations had newborn child death cases over 100 for every 1,000 out of 2006. The same year, nine different nations in the landmass documented newborn child death cases somewhere in the range of 77.5 and 92.6 per 1,000, ten others recorded somewhere in the range of 57 and 72.7 per 1000, eight others recorded somewhere in the range of 31.4 and 52.4 per 1,000, and just four (Eneh, 2014).

The normal under-five death rate (U5MR) for African nations in 2006 was 138 for each 1,000. Two nations recorded 250 or more for every 1000, four nations recorded in the range of 200 and 249 for each 1000, seventeen nations had in the range of 150 and 199 for each 1000, fourteen nations had in the range of 100 and 149 for each 1000, and another fourteen nations had 100 and beneath per 1000 (Eneh, 2011). Occurrences of diarrhea is proportional to water accessibility, sanitary services, and Handwashing. A country like Nigeria – the most populous nation in Africa- there were 673,692 revealed instances of diarrhea in 2003.

This appalling number expanded to 732,728 for the next year, to 800,611 out of 2006, and 1,069,133 out of 2007. Related losses were 2,368 (2003), 2,116 (2004), 2,093 (2006) and 2,454 (2007). The year, 2003 and 2007, there was the largest reported deaths as a result of diarrhea (4,190), in any event, when there were less recounted instances of diarrhea (682,828) than the earlier year and the subsequent year (NBS,2007 cited in Eneh, 2014).

Diarrheal infections came second after malaria as the fundamental root of newborn child mortality and death. Since decent sanitary behaviors, that entails sufficient water availability, are precautionary processes for diarrheal infections, the high records are legitimately identified with water and sanitary emergency in Africa. There is additionally the peril of experiencing pale skin throughout a water emergency. Weighty water sources disturbance and yellow skin. It's also liable for unclean water infiltration and dry skin, thereby prompting helpless skin texture, tone, and color (AfDB, 2007a).

In some creating African nations, the wellbeing and commercial results of helpless water management integrate 4.6 million loss of lives from diarrheal malady and a substantial amount of fatalities from ascariasis (Esrey et al, 1991 cited in Eneh, 2014). In the West African sub-area, there are projected 4 million instances of guinea worm, while around 500 million instances of trachoma prompt visual deficiency of around 8 million individuals every year (Hoddinott, 1997). Research demonstrates that zoonotic sicknesses (sent from animals to people) are yet to be dispensed with or completely managed in over 80 % of the public slaughterhouses in Nigeria. A portion of the irresistible maladies are tuberculosis, colibacillosis, salmonellosis, brucellosis, and helminthiases (Olugasa et al, 2000) Patients in medical clinics and other medical services are on the rise due to waterborne ailments. There is an increased rate of typhoid, cholera, diarrheal, contagious hepatitis, and guinea worm in metropolitan dwellers of Nigeria (Sangodoyin, 1995) Individuals experiencing sicknesses associated with unhealthy sanitary behaviors take up more than half of medical clinic beds in sub-Sahara Africa. What's more, these diseases represent a monstrous 12% of the wellbeing spending plan. Work and school days are gone to these ailments, prompting 3-5% misfortunes in Gross Domestic Product (GDP) (Earthwatch, 2009).

2.4 Sustainable Development Goal 6

The Sustainable Development Goals (SDGs), approved by the United Nations General Assembly for the period 2015–2030, as a continuation to the Millennium Development Goals (MDGs) for the period 2000–2015, contain unambiguous objectives vis-à-vis the enhancement of water quality worldwide and the growth in water-usage productivity and decline in water insufficiency. In the year 2000, Heads of government accepted the Millennium Declaration through which eight MDGs set out components for the development plan, as well as target 7C: to halve “the proportion of the population without sustainable connection to safe domestic water and basic sanitary services” by 2015. Though, initial expression simply mentioned domestic water and it was not until 2002 that sanitary services was included after the 2002 Johannesburg Blueprint of Action (Otigara et al, 2018).

The Water and Sanitation Collaboration Council (WSSCC) created an instructive focus for water and sanitation inclusion for the Second World Water Forum, The Hague, 17-22 March 2000, as follows:

- Decline by one-half by the year 2015 the extent of individuals without connection healthy sanitary means.
- Decrease by one-half by the year 2015 the extent of individuals short of an easy connection to a sufficient quantity of healthy water.
- Provision of water, sanitary services, and hygiene for all by the year 2025.

The Vision 21 report focuses on the need to think about these demonstrative focuses on the indigenous setting. These objectives expand upon the objective of general inclusion built up for the global Drinking Water and Sanitation Decade 1981-1990 at the World Summit for Children in 1980 (WHO, 2003). Unchanged or unpotable water means are unguarded well, unprotected spring, waterways or lakes, merchant delivered water, filtered water, and big hauler water truck, while consumable water sources are domestic

taps, public standpipe, borehole, secured burrowed well, ensured spring and rainwater gathering (WHO/UNICEF 2004).

MDG 7 completely didn't catch 'quality' as far as the connection to water and sanitary services and did exclude benchmarks and measuring sticks for wastewater treatment and a durable water board assessment. Wastewater stays untreated in numerous nations in East and Southeast Asia, North Africa, and Eastern and Southern Europe (Flörke et al. 2013) and is regularly disposed of in freshwater bodies on its hurtful structure. It turned into a widespread need to diminish the degree to which untreated wastewater is disposed of off in freshwater bodies. Henceforth, the requirement for water-sparing and using water reuse, the presentation of low flush latrines, and dry latrines particularly for water-scant nations (Erni et al. 2010; Flörke et al. 2013; Rouse 2014).

SDG 6 merge is a reflection of the managing of freshwater assets, the supply of drinkable and domestic water and sanitary facilities, and habit of healthy sanitization activities. These mirrors together growing pressures on water environments and the accompanying controlling prerequisites, and the increased levels of connection and growing rates in delivering domestic water and sanitary services. The eight targets of SDG 6, plus 10 other water-related targets within other Goals, characterize fundamental surge in relative significance specific to water and sanitary services matched with the MDG plan (UNDP, 2020).

Water is the fundamental nourishment of the human body and basic to human life. It bolsters the assimilation of food, retention, transportation, and utilization of supplements and the disposal of poisons and contaminants from the body. Water is additionally basic for the planning of foodstuff (WHO, 2003). Household water is characterized as 'water utilized for all typical residential purposes including drinking, washing, and food processes.' Safe household water will be water that is protected enough for these residential usages. It doesn't contain perilous constituents that render it unsuitable or risky for drinking and other household purposes. In the same vein, safe drinking water or consumable water will be water for drinking that doesn't contain contaminants that render it hazardous for drinking (WHO, 2003).

In the 2003 report on Water Supply and Sanitation in Water, Sanitation and Health by the WHO, the principal discoveries of worldwide Water Supply and Sanitation Evaluation 2000 report comprise;

- Water-borne sickness transmission happens by drinking dirty water.
- Water-washed sickness happens when there is an absence of adequate amounts of water for washing and individual cleanliness.
- Diarrhea is the most significant general medical challenge influenced by water and sanitary practices and can be both water-borne and water-washed.
- There are around 4 billion yearly instances of Diarrhea, causing 2.2 million loss of lives generally among under-5 youngsters (comparable to a kid kicking the bucket at regular intervals).
- Intestinal worms taint around 10 % of the number of people in the emerging world. These intestinal contaminations can prompt ailing health, paleness, and impeded development, contingent upon the seriousness of the disease.

About 6 million individuals are visually impaired from trachoma and in any event, 500 million are in danger of this malady. Sufficient amounts of water lessen the middle disease by 25 %.

Approximately 200 million are tainted with schistosomiasis, of which 20 million undergo serious outcomes. Well planned water and sanitary services programs lessen the middle disease by 77 %.

- Arsenic in drinking water is a significant danger of general wellbeing.
- Cholera is an overall issue that can be forestalled by guaranteeing that everybody approaches safe drinking water, sufficient excreta removal frameworks, and general cleanliness practices.
- Adequate amounts of safe water and healthy sanitary services are vital conditions for solid living. The arrangement of satisfactory safe residential water is welfare guaranteeing measure. The amount of water an individual's use relies upon a straightforward connection to it. Improving the connection to safe water means is a significant safety challenge of the United Nations System, particularly the World Health Organization. (WHO/UNICEF, 2004).

Even though a connection to drinking water is a key human need, essential basic freedom in creating nations, water-borne infections curse the lives of poor people (Kofi Annan and Brundtland, 2005).

The manners in which individuals get their water comprises

- Vendor- supply water, ensured wells and springs, water settlement, tube wells fitted with hand mechanisms.
- Complex funneled supplies, little network channeled supplies.
- Emerging kinds of deliveries, for example, desalinated water and packaged/bundled water, and
- Special circumstances, for example, water deliveries in crises and medical care offices (WHO, 2005).

In the year 2000, 18 % of the total populace approached networked water. Just 35 % approached improved wellsprings of water, while 47 % approached through family unit associations (6). Having links to suitable water is one of the prevalent difficulties in Nigeria and other unindustrialized nations. Accessible data show that connection to improved water was 39 % in 1999, piped links to safe water was 50 % in 1995, and 54 % in 1999 in Nigeria (FGN/UNICEF, 2001).

Water contains two categories of substance: the inorganic or mineral and the natural. The dissolvable inorganic constituents are generally salts of calcium and magnesium, which results in the toughness of water. There is no proof that they are dangerous to wellbeing. Other inorganic substances, similar to normal salt, are immaterial in everything except most abnormal waters (Gruener Hippolyte, 1933). The natural constituents, particularly the microorganisms, are more significant. Water polluted by infection bearing miniature creatures has off-taste and causes cholera, typhoid fever, and intestinal inconveniences, e.g. dysentery, and other medical issues. Henceforth, the overall wellbeing of a network has profited when the suitability of water is improved (Gruener Hippolyte, 1933).

Of all the water-borne illnesses, typhoid fever is the most grave, even though it is avoidable. The main causative agent of typhoid fever – a typical waterborne infection and killer in Nigeria – is an unsuitable drinking water source (Gruener Hippolyte, 1933).

There is constantly being worked on and winning basic lack and want in Nigeria – "the place that is known for abundance". While extending and developing poverty, exacerbated by a significant level of debasement in Nigeria, unsuitable connection to safe drinking water stays unabated, as is the quantity of lives lost to typhoid fever every year, particularly with treatment disappointments credited to the course of counterfeit medications. Thus, the spate of death hypothetically ascribed to typhoid fever seems, by all accounts, to be on the expansion in the nation (Eneh, 2005). Drinking water devoured in many networks in Nigeria is generally from unsuitable means.

The dwellers drink unprotected well water, unprotected spring water, waterway or lake water, vendor-supplied water, sachet water, and big hauler truck water. Consequently, it is guessed that

- The amount of lives lost to typhoid fever every year in Nigeria and other emerging nations is on the rise, and
- Unsuitable drinking water from different dirty sources drunk by the dwellers of a locality is liable for this turn of events.

Water, sanitary services, and hygiene development projects regularly harp on the arrangement of improved water means for individuals. Huge numbers of these undertakings are not finished, yet deserted halfway, like most activities in Nigeria (Eneh, 2005). The nature of water might be controlled through a mix of security of water sources, control of water treatment cycles, and the management of the supply and treatment of the water (WHO, 2006). Investigation of possibly hazardous water constituents gives a premise to surveying drinking water quality. Thus, on a couple of constituents or contaminants of concern, which are generally determined by the pertinent monitoring organization and nearby water specialists of the nation concerned, will guarantee that endeavors and ventures can be coordinated to those constituents of importance that are of general wellbeing relevance in the community (Njoku et al, 2006).

In the Framework of Safe Drinking Water – Drinking Water Quality, (WHO, 2006) gives the microbial and chemical needs for surveying the nature of drinking water. The strategy works for the examination of water from an offered source to determine the measures that should be taken to improve it for drinking or to underscore the need to discard it for another means of drinking water. This technique, which evaluates the

nature of the water from a water source, isn't reasonable for appraisal of the effect of the suitability level of drinking water taken by residents of a network with different means of getting drinking water. Or maybe, the more seasoned technique, the typhoid passing rate strategy for evaluation of the effect of safety level of drinking water of different sources expended in a network is a suitable alternative. The technique utilizes the appraisals of yearly typhoid deaths per 100,000 of the number of people in the water delivery from various sources devoured by the occupants of the objective network. Generally, one demise speaks to 10 instances of ailment from the sickness (Eneh, 2006).

Sanitation is a far-reaching term and it implies something beyond latrines. It can be perceived as projects that lessen human contact to ailments by giving healthy surroundings in which to live. It includes both practices and infrastructures, which cooperate to frame a clean environment. Around 524 million individuals, which is almost half, empty their bowels in the open. For example, India represents 90 percent of the individuals in South Asia and 59 percent of the 1.1 billion individuals on the planet who practice open excretion. The protected removal of kids' stool is of specific danger and is the most probable reason for fecal pollution to the nuclear family unit. The particular removal technique, which is probably going to guarantee insurance of the family condition from fecal sully, is putting or washing stools into a sanitary service (Undavalli et al, 2020).

As indicated by UNICEF, 44 percent of mothers arrange their kid's defecation in the open, there is an exceptionally high danger of microbial infection (bacteria, viruses, Amoeba) of water which causes loose bowels in kids. This is the primary explanation India reports the largest number of diarrhoeal deaths among kids under-five on the planet. Consistently, the looseness of the bowels kills 17,285 children under five in India. Young infants debilitated by incessant loose bowels incidences are more powerless against lack of healthy nutrition, poor growth, and deft contaminations, for example, pneumonia. Around 38 percent of kids in India experience the ill effects of some level of hunger. Loose bowels and worm disease are two significant welfare conditions that influence young kids affecting their learning capacities. Open excreta removal likewise puts in danger the respect of ladies in India. Ladies feel compelled to ease themselves just under a covering because of reasons of security to ensure their dignity (UNICEF, 2017)

Public excretion opens ladies to the peril of physical assaults and experiences, for example, snake attacks. Dirty sanitary services additionally handicap public turn of events: laborers produce less, carry on with shorter lives, and contribute less, and are less ready to send their kids to class (UNICEF, 2017).

Focus area of the SDG 6 includes the following objectives;

(6.1) arrangement of drinking water and disinfection and cleanliness administrations

(6.2), treatment and recycle of wastewater and surrounding water quality

(6.3), water-use productivity and shortage

(6.4), IWRM comprising thorough transboundary collaboration

(6.5), security and reclamation of aquatic water-related environments

(6.6), worldwide collaboration and human development

(6.a), community cooperation in water and sanitary management

(6.b) Eleven yardsticks to evaluate improvement concerning these objectives.

All the yardsticks were new, however, some depended on pointers from the MDG time frame, and now joined numerous new components that mirror the expanded desire of the 2030 Agenda. Not all yardsticks were entrenched. Few were characterized, but most are in an advancement stage (Renata et al, 2018).

The UN grouped pointers in three levels as per their degree of advancement:

Level I pointers had built up strategies, guidelines, and information accessible for at any rate half of the worldwide populace and half of nations,

Level II pointers had built up strategies and guidelines, however, information was not normally delivered by nations, and

Level III had no settled approaches, where all the while being created. The level grouping was refreshed consistently.

Target 6.1 termed it dynamically cultivating the nature of administrations to 2.1 billion individuals in need of water open on-surroundings, accessible once required, liberated from sullyng (securely oversaw drinkable water) and contacting the 4.5 billion individuals overall who did not have a steady administered sanitary administration in 2015 (WHO/UNICEF, 2017).

The above prompted the goals for drinkable and domestic water, sanitary services, and hygiene calling for an all-inclusive and impartial connection in protecting and moderating management for all by 2030. They based on the MDGs however worked out in a good way past just estimating connection to a foundation to assess the nature of administrations gave. Pointer 6.1.1 was tied in with checking the extent of populace utilizing securely oversaw drinking water (accessible on the premises, at whatever point required, and liberated from fecal and substance sullyng). Pointer 6.2.1 observed securely oversaw sanitation (not shared and feces securely arranged) and incorporated handwashing services. The primary worry was not the pointers essentially, yet the sheer volume of information required for evaluation. As an outcome, huge information holes were distinguished in certain nations, chiefly in light of presenting the new yardsticks (Otigara et al, 2018).

Target 6.3—Water Quality and Wastewater: The objective introduced exceptionally difficult difficulties for some nations. Universally, 80% of all wastewater (from homegrown, modern, and metropolitan means, and horticulture) were accounted for to be released unprocessed into water bodies (WWAP/UNESCO, 2017) Notwithstanding, the objective motivated nations to divide the extent of unprocessed wastewater by 2030 by expanding wastewater assortment, guaranteeing that treatment delivered wastes that reliably satisfied public guidelines both for residential sewage and mechanical wastewater. Managing what were portrayed as point-source arrangements likewise expected to go pair with handling diffuse contamination, fundamentally from agribusiness.

Water contamination has declined since the 1990s in practically all the waterways in Latin America, Africa, and Asia, putting a huge number of individuals in danger the same number of creating nations would have in general zero in on the monetary and social turn of events, frequently to the detriment of the water-related condition. Growth on this objective is likewise connected to safe drinking water, lessening waterborne ailment, and safe water for expanding food creation, in addition to numerous other improvement concerns. It was observed utilizing two yardsticks: Indicator 6.3.1 checked the extent of securely treated wastewater and Pointer 6.3.2 observed the extent of water bodies with great encompassing water quality. As with Pointers 6.1 and 6.2, the information obtaining a significant test for checking the two pointers. The productivity of observing projects and information understanding differed in industrialized nations, however, significant difficulties were normal in creating nations, predominantly because of the absence of a physical foundation for test assortment and investigation and human limit. Information was frequently put away inside single foundations and numerous nations didn't have a focal office for water-quality information, nor did they have strategies set up to orchestrate information guidelines and empower intra-and inter-sectoral collaboration inside and past public limits. The report couldn't give nitty gritty bits of knowledge into modern contamination, as releases were inadequately observed, and information was only sometimes accessible at the public level (UNEN, 2016)

Objective 6.4—Water Use and Shortage is focused on water-usage proficiency (Pointer 6.4.1) and water shortage (Pointer 6.4.2) — the two perspectives demonstrated hard to evaluate on a worldwide scale. There were worries about the pointers just as the accessible information. Hence, examination depended on information effectively accessible in global information, for example, AQUASTAT (FAO, 2017).

Pointer 6.4.1 was tied in with utilizing a reduced amount of water to complete society's monetary exercises and estimated the budgetary worth delivered by an economy (i.e., GDP, GDP) comparative with the quantity of water utilized (US\$/m³). It incorporated total water utilized in districts, industry, farming, and mining. It is because most nations depended under 30% on farming for their GDP, the findings contended that it was basic to think through all the areas utilizing water to evaluate the limit concerning financial development

without overexploiting water assets. In any case, the report recommended that this pointer didn't recount the entire story for those nations that their GDP depended on little-value agriculture. Enhancements in water profitability and water system productivity in agribusiness and decreasing water misfortunes in metropolitan circulation organizations and modern and vitality cooling measures were included as a primary concern that yardsticks would screen and furnish leaders with the data they have to arrange their improvement decisions (Otigara et al, 2018).

It became essential to comprehend the SDG 6 meaning of water-usage productivity to maintain a strategic distance from disarray with different meanings of effectiveness normally utilized in the water area. Water-supply designers, for instance, measure water-use proficiency for the measure of water misplaced between spillage comparative with the measure of water provided into the network. Water system engineers characterize water-use proficiency as the measure of water devoured by a yield separated by the sum pulled back from a water means, or the measure of water expended to create a deliberate amount of output. Enhancing water-use productivity suggested water sparing and ensuing water accessibility for different reasons, for example, natural streams, however, this isn't generally the situation. The examination has demonstrated that ranchers who 'spared' water by putting resources into different innovations would in general build their flooded territory instead of delivering water for others to utilize (FAO/WWC, 2018: Grafton et al, 2018).

Water pressure influenced nations on each landmass, and prevented the supportability of normal assets, just as the financial and social turn of events. parameter 6.4.2 estimated water shortage as the extent of absolute freshwater pulled back to the completely accessible asset. The pointer currently incorporated all water utilizes and especially natural stream necessities to continue essential water-related biological systems. yardstick 6.4.2 was a genuine case of how scale influenced the consequence of observing and announcing. Normal worldwide pressure esteem was just 11% that may lead some to reason that the world was not so much setting out toward a water emergency. Nonetheless, there were unmistakably critical contrasts among nations and districts that were covered up inside the worldwide figure. Sub-Saharan Africa, for instance, was accounted for to encounter just 3% water pressure, yet this territorial worth shrouded the enormous contrasts between the wet north and the dry south that consistently experienced serious dry spell. Comparable critical contrasts could likewise happen inside nations and catchments. Disaggregating information to (sub) country or (sub-) basin level must be the standard to help policymakers. It was relevant that, inside southern Africa, there were critical water-asset blessings that were immature, and under 18% of horticultural land was outfitted with water system frameworks (FAO, 2018).

In this manner, a few withdrawals of the all-out accessible water assets stayed low and agribusiness was generally subject to the vulnerabilities of downpour took care of cultivating. For the momentum pointers, as economies develop, nations will in general utilize more water for the water system, family units, vitality, industry, mining, and recreation. Each has an alternate ability to create value. Information indicated that, in many nations, there was an extension to expand water use without influencing water assets. In any case, a decrease in water-use productivity, especially whenever joined by an expansion in water pressure, would rather demonstrate that the advancement example will get unreasonable later on (UN, 2018).

Target 6.5—IWRM This objective is tied in with incorporating IWRM inside the public (parameter 6.5.1) and transboundary settings (target 6.5.2). Mix was a focal subject over the whole 2030 Agenda and the conclusion contended incorporating IWRM will be the most complete advances that nations be able to make concerning accomplishing Goal 6. Executing an all-encompassing IWRM method would give institutional arrangements and multi-partner cycles to adjust the turn of events and utilization of water assets for individuals, for feasible monetary development, and for supporting indispensable water-related biological system administrations. There was 'nobody size fits all' arrangement. Every nation would need to look for its pathway towards joining dependent on its extraordinary blend of characteristic assets and social and monetary turn of events. A significant feature would be long haul political duty to modify at the most significant rate (Kadi, 2016).

These findings alluded to a system elevated by advanced nations to assist nations with settling on the activities required dependent on their degree of financial advancement. The proof was likewise introduced that connected a nation's Human Development Index (HDI) with IWRM development. This highlighted IWRM being essentially connected with more extravagant nations, yet proof in the report recommended this was not generally the situation. As per Shah (2016) high HDI facilitated however low HDI was not a boundary to executing IWRM in nations that had solid public institutional limit and organization, and high partner cooperation at public and nearby points. Eight African nations were recorded as reaching significant strides through incorporating IWRM (Shah, 2016).

Report and advancement on IWRM were estimated utilizing a poll. It was nation motivated, intended at incorporating both numerous administrative and nongovernmental partner gatherings. Finished surveys, which encompasses thinking for the scores for each question, furnished public strategy producers with an asymptomatic device to distinguish which zones were advancing admirably, and those that might be confronting boundaries to advance. Enquiries were presented around four classes: the presentation of strategy, regulations, and strategies (worldwide normal score, half); organizations and investment (53%); the utilization of the board apparatuses (49%); and funding (39%). The worldwide IWRM mark was 48%, comparing to medium-low usage dependent on studies from 157 nations. Prior overviews in 2007 and 2011 (alluded to in the findings) indicated humble advancement internationally. All nations were not expected to arrive at full usage by 2030 (UNEP, 2018).

Pointer 6.5.2 estimated as well as observed the extent of a transboundary basin region inside a nation secured by an 'operational game plan' characterized as a settlement, show, understanding, or another proper course of action that met a few operational models that looked to go past just estimating whether courses of action were set up. This was a significant objective since it was one of only a handful few SDG focuses on that expressly requested transboundary collaboration over the management of the common asset. Most nations, with riparian rights, perceived the significance of receiving basin-wide participation arrangements to share water in waterways, lakes, and springs. In light of surveys, the normal of the public level of transboundary basin safeguarded by an operational course of action was 59% dependent on information from 61 out of 153 nations sharing transboundary waters. Nations featured critical difficulties in creating transboundary agreeable plans, for example, power asymmetries among nations; discontinuity in public legitimate, institutional, and authoritative structures; absence of budgetary, human, and specialized limit; and helpless information accessibility, particularly corresponding to transboundary springs (UN, 2018)

Despite these difficulties, overseeing water bodies that cross public authoritative limits could catalyze collaboration, carry harmony and steadiness to locales, and advance financial turn of events. One of the qualities of surveys was that information can be effectively broken down by a question and utilized by nations as a fast symptomatic device. This could assist with recognizing those parts of IWRM and transboundary the board that was advancing great, and at what level (nearby, public, or transboundary) and feature obstructions to advance. The report proposed the best chances to quicken usage were in funding water-asset improvement and the management, and in regressing IWRM to the most reduced suitable level. 4.5 (Otigara et al, 2018).

Target 6.6—Water-Related Ecosystems The world has lost around 70% of its regular wetland throughout the only remaining era, including substantial loss of freshwater species. Such misfortunes can truly undermine feasible improvement since water-related environments support different SDGs, specifically those identifying with food and energy creation, biodiversity, and biological systems ashore and ocean. Ensuring and reestablishing water-related biological systems couldn't be accomplished without progress on these different objectives and the other way around. Water-related environments would in general be overseen for the momentary increase to the detriment of long haul advantages, and huge scope human exercises took steps to corrupt and wreck them (GWP, 2016).

This objective looked to end biological system debasement and annihilation and to help with recuperating those effectively corrupted. Pointer 6.6.1 united data on four classifications of environments: vegetated wetlands (counting swamps, swamp backwoods, bogs, paddies, peatlands, and mangroves), untamed water bodies, (for example, lakes and repositories), streams and estuaries, and groundwater. Four sub-markers (spatial degree, water amount, water quality, and environment wellbeing) portrayed various parts of these biological systems. The report recommended that worldwide information utilized during the SDG cycle didn't mirror the settled concerns and patterns on freshwater-environment corruption that other information means show. Information assortment frameworks didn't separate among normal and counterfeit water bodies, for example, supplies, dams, and rice paddies. All have been expanding in many districts, while common wetlands were in decrease. The worldwide pointer was useful in featuring these concerns however was viewed as excessively expansive for dynamic. Lacking information was produced by nations to sufficiently gauge progress. Further definite information (numerical, geospatial, and subjective) would be fundamental for more precise comprehension of water-related environments and the advantages they give. Earth perceptions could supplement nearby ground information and backing the public weight of procurement and revealing. Part States were encouraged to fortify operational limit and increment monetary assets, execute clear jobs and duties regarding information assortment and handling, and guarantee political will at the most elevated scope. Checking at the biological system level and basin-scale was significant. The neighborhood-level would give proof to pragmatic activity, while bigger basin checking would give a general point of view inside hydrological limits. Observing additionally uncovered an assortment of chances, for example, checking change after some time. Seeing how biological systems were changing could give proof of their worth that could support dynamic towards their future insurance and rebuilding (Kay et al, 2016).

Target 6a—Cooperation and Capacity Building International participation and building (creating) limit added to all the SDG targets, however, the findings proposed nations should be better perceived and the observing system enhanced after some period, conceivably with extra pointers. The collaboration was generally about subsidizing and was unequivocally centered around outer help. Significantly all the more financing was expected to reach SDG 6 Objectives 6.1 to 6.6. At present, information is deficient to survey the degree to which abroad advancement help was remembered for government expenditure strategies. Most information accessible were from the WASH part in light of the broad accessibility of important information. Barely any information was accessible on other water-related ventures and on subsidizing for the common expenses of activity and upkeep. There was so far no pointer to limit improvement identified with the full extent of SDG 6. Information accessible on limit needs and progress were to a great extent restricted to the WASH area (Otigara et al, 2018).

Target 6b—Stakeholder Collaboration, Effective and sustainable water management relied upon partners taking an interest in choices connected to water improvement. Singto et al. (2018) presumed that "support ought to be standardized and encouraged such that cultivates responsible portrayal by all partners, manufactures trust, and' perceives partner interests and information". In 2015, over 75% of nations announced having characterized strategies and methods set up for administration clients and networks to take an interest in arranging agendas for drinking water gracefully (metropolitan: 79%, country: 85%) and sterilization (metropolitan: 79%, provincial: 81%) (WHO, 2017).

For water-asset management and forecasting, 83% of revealing nations had strategies and systems set up. Even though these outcomes look empowering, there were worries over how cooperation was observed and, thusly, the checking system was as yet being worked on. Current estimations depended distinctly on the quantities of individuals engaged with interest, though the objective required a more clear arrangement of markers that incorporated the nature of cooperation, for example, nature, viability, and worth. The information for this pointer generally originated from the WASH division, although means we're set up to incorporate information from different exercises, for example, IWRM. Monitoring is expected to give an 'expression' to different gatherings, especially those in horticulture where there is a lengthened convention of rancher cooperation in water-client affiliations (Kay et al, 2018).

The 2016 report on Sustainable Mining shows that Goal 6 of the SDG is to guarantee the availability and sustainable management of water and sanitary services for all. Clean water is crucial for humans and the natural world. Poor sanitation, poor hygiene, and inadequate infrastructure cause diseases and millions of deaths yearly. Connection to clean water and good sanitary services stop the spread of diseases and improve general wellbeing, and clean waterways help in ensuring a healthy living condition. The two initial objectives of SDG 6 remain as a follow-up to the benchmark on ensuring adequate drinking water and sanitation situations which were at present, a part of the MDGs. New in SDG 6 is the addition of more objectives in making sure of the water quality, decreasing water contamination, growing water-use productivity, enhanced water managing, guarding the environments, solidification of international collaboration, and linking the grass-root societies. Similarly, innovative is that the SDGs unequivocally mention all countries in the world, whereas the MDGs existed primarily and was fixated on unindustrialized economies. For water, this is imperative since users and manufacturers in developed countries meaningfully add to water adulteration and water overexploitation too (Hoekstra, A.Y.; Mekonnen, M.M, 2012).

Thus, Goal 6 is one of the 17 SDGs in the UN 2030 Agenda for Sustainable Development that symbolized the collective objectives for accomplishing a future that is exclusive of poverty, fair, impartial, nonviolent, and sustainable and that leaves no one behind. It offered a basis that encouraged the generality and cooperation amongst countries, brought together all stakeholders, and stirred up different acts. It welcomed everybody from the emergent and industrialized countries to acknowledge and accept inclusiveness and interconnectedness associated with the goal (Kadi, 2016).

Goal 6 is one of the furthestmost intersected sustainable goals- the enhanced connection to WASH encourages education, economic growth, poverty decline, health and has other benefits attached. For this reason, healthy, affordable, and clean water, decent toilets, and good hygiene are human rights, to which millions of people lack access to. This lack of water, sanitation, and hygiene facilities limit the people from having a fair chance to be healthy, refined, and economically stable (WaterAid, 2019).

According to JMP (2004), drinkable water and sanitation is defined in terms of the nature of machinery used and the levels of services provided in the production of clean water, and the number of domestic households that have access or benefit from the service.

Table 2.2: JMP descriptions of water supply and sanitation (2004 cited in 2010 WHO/UNICEF/RADWQ Nigeria report).

Category	Water supply	Sanitation
Upgraded	<ul style="list-style-type: none"> • Domestic connection • Communal standpipe • Borehole • Secure dug well • Safe spring • Rainwater collection 	<ul style="list-style-type: none"> • Connection to a public sewer • Connection to the septic system • Pour-flush latrine • Simple pit latrine • Aired and enhanced pit latrine
Not upgraded	<ul style="list-style-type: none"> • Unprotected well • Unprotected spring • vendor-provided water • Bottled water • Tanker truck-provided water 	<ul style="list-style-type: none"> • Service or bucket latrines (where human feces are removed by hand) • Unrestricted pits • Pits with an open lids

2.5.5 Assessment Report of SDG 6 in Nigeria

Though Nigeria's water, sanitation, and hygiene (WASH) sector recorded reasonable improvement for the period of the Millennium Development Goal in increasing the unhindered access to drinking water, the provision of high-quality, dependable, and sustainable services is low. Only 61% of the general public are connected to an enhanced water supply scheme. Just 41% in a 30-minute round trip of their home, 31% on properties and 7% have pipe born water inside their home. The sanitation sector is in a very precarious situation. Only 29% of Nigerians have access to unshared upgraded sanitation, and the open defecation rate is projected to be 25% (Adebayo & Garrett, 2019).

According to WASH NORM (2019), the high rate of open defecation in Nigeria has gotten a very alarming rate that has attracted different reactions and concerns around the globe. In an assessment of Nigeria that was conducted on the rate of open defecation in 2018, findings divulge that Nigeria ranks highly between nations involved in open defecation across the world. Also, outcomes from the investigation show that about 24 percent of the population (47 million people) still engage in open defecation. By implication, one in four Nigerians empties their bowels in the public place. Again, Nigeria is amongst the nations in the world with the highest number of people engaging in public defecation which has been projected to be a little over 47 million people. This practice has had a damaging and harmful outcome on the general public, specifically children, in the areas of health and education and has also contributed to the country's inability to attain the Millennium Development Goal target that was set in 2015.

In another 2018 report by the United Nations' Children Emergency Fund (UNICEF), findings reveal that open defecation has overwhelming and debilitating effects on public health. For example, excreta contamination of the surroundings and poor hygiene practices continue to be one of the primary causes of child death, ill health, undernutrition, and poor development and growth. These have damaging outcomes on the mental development of children. About 8 percent of the sludge in Nigeria is deposited in exposed pits and waterbodies, 40 percent is covered up in enclosed pits and only about 12.5 percent is poured into treatment plants. Nigeria considers excreta to be securely managed if it is dumped and covered up in an enclosed or concealed pit (only in case the toilet facility is not open for public usage) by household owners or service providers (UNICEF, 2018).

Similarly, poor sanitary services can also be a major hindrance to access to quality education and economic prospects, with women and girls often predominantly at risk of the damaging effects as a result of poor sanitary facilities. The numerous harsh outcomes of poor sanitary services is an indication of how SDG 6.2 buttresses and strengthens the need that it is crucial to attaining the other SDGs, together with those linked to nutrition, health, education, poverty and economic growth, and gender equality (Vanguard, 2019 pp. 12). Although the connection with clean sanitary services has updated meaningfully, due to enhanced financing and endeavors by UNICEF, the European Union, and other worldwide improvement offices attempting to accomplish the Sustainable Development Goal 6 on clean Water, good sanitary services and Hygiene (WASH); the outcomes are still a long way from measurable. More than two-thirds of Nigeria's populace experience the ill effects of poor cleanliness and live without connection to fundamental sewage and sanitary services. Also, without appropriate sanitary services, individuals must choose between limited options than to excrete in open and risky spots, pulling in undesirable welfare dangers and security issues, particularly for ladies and children. Moreover, the difficulties of open excretion in Nigeria has now been distinguished as the nation with the greatest number of individuals that pass feces openly. The administration's findings, the WASH National Outcome Routine Mapping (WASH-NORM) review of 2018 says that around 47 million Nigerians practice public excretion. Not exclusively do families, yet 40.3 percent of schools also don't have any latrine, a similar report says. The nation needs to accelerate the development of safe latrines and oversee fecal slop on a war balance. The Joint Monitoring Program report distributed mutually by the United Nations Children's Fund and the World Health Organization in 2019 says that just about 70 percent

of the country's family and 44 percent of metropolitan family latrines have never purged excreta from their on-location offices in Nigeria.

The 2018 WASH-NORM report says that fecal sludge has never been emptied from more than 50 percent of the household toilets; around 26.5 percent of people do not have any clue as to where the sludge was disposed after they emptied the toilets. Around 8 percent of the sludge in Nigeria is emptied in exposed pits and waterbodies, 40 percent is buried in concealed pits and only 12.5 percent is carried to treatment plants. Nigeria contemplates feces to be securely taken care of if it is emptied and buried in a concealed pit (only in case the toilet facility is not shared) by household owners or service providers. This is prevalent in urban areas than in rural areas. It is also seen that in rural areas, most households did not have a clue as to where the sludge was deposited. The universal population forgoes hand washing after using the toilet due to sanitation illiteracy, lack of proper water supply systems, and poorly sustained amenities. With the gaps in sanitation infrastructure, Nigerians can only dream of modest toilet services (Kevwe, 2019).

Not just fecal sludge, wastewater is also not managed in Nigeria. According to the WASH-NORM survey, 2018, around 16.5 percent of the households reported wastewater leakage or overflow from their household toilets in Nigeria. In most cities, there are reports of no wastewater treatment plants or defunct treatment plants. As a result, wastewater is discarded directly into water bodies. For example, the Lagos state makes around 1.4 trillion cubic centimeters of wastewater. Septic tanks in the densely-populated areas of the state like Badagry, Mushin, Oshodi, and Ikorodu are in a state of misery, which has resulted in groundwater pollution based to the Journal of Sustainable Development, 2016.

Oraka (2020) stresses that at a recent pace, Nigeria is not on track and there is extensive work to be done in attaining the possibilities of SDG 6 - making sure that there are clean water and sanitation for all. Furthermore, the National Action Plan has a very brilliant prospect of scaling up the drive concerning universal access in Nigeria by 2030. With only 10 years left before this important benchmark, now will be the time to muster all the necessary means needed for the actualization of this goal.

2.5 The Impact of Goal 6 on Sustainable Development

Access to safe drinking water, sanitation, and hygiene is very significant for sustainable development. (UN-Water, 2014). The interconnectedness associated with water and sustainable development goes way deeper than the social, economic, and environmental aspects of the Sustainable Development Goal. Human health, food, and energy security, urbanization, and industrial growth, and climate change are the essential problem zones upon which the guidelines and procedures are reinforced (or undermined) through water (WWAP, 2015a).

The paucity of water supply, sanitation, and hygiene (WASH) has an enormous impact or effect on the health and welfare of people. This appears at a huge financial price, plus a very substantial loss of economic activity. In achieving unhindered connection, there is a need for enhanced improvement in the underprivileged settings plus ensuring there are no restrictions in the provision of WASH-related services. Financial ventures in water and sanitation services cause sizeable economic benefits; in emerging and third world regions, the yield huge investments valued about US\$5 to US\$28 for one dollar. An expected US\$53 billion yearly throughout five years will be required to attain universal coverage. (WWAP, 2015a).

The rise in the number of people short of connection to water and sanitary services in the town areas are directly linked to the explosive growth of slums in the third world countries and the failure (or reluctance) of local and national governments to deliver acceptable water and sanitary amenities in these areas. The world's slum population, which was projected towards nearly 900 million by 2020, will moreover be susceptible to the effects or the consequences of severe weather happenings (UN Habitat, 2010). It is still feasible to enhance the outcome of urban water supply systems at the same time working to enlarge the system and tackling the desires of the poor. Future prognoses indicate that by 2050, the agricultural industry

will as a matter of necessity yield 60% additional food worldwide, and 100% extra in third world nations (Alexandratos and Bruinsma, 2012). As the recent increase in agricultural water needs around the globe cannot be maintained (WWAP, 2015a), as the agricultural industry require a surge in its water use effectiveness through the water loss reduction and, most notably, improve crop production together in respect to water.

Hukka and Nyangeri (2014) submit that attaining a green economy is unlikely if there is no plan to make sure that everyone has access to water and sanitary services. Worldwide, connection to these amenities has demonstrated that there has to be a thought out and well-planned phase of lifting people out of poverty and environmental destruction.

Energy production is largely water consuming. Meeting the ever-rising challenges designed for energy will cause rising strain on freshwater resources with far-reaching implications on other users, such as agriculture and businesses. Since these sectors also need energy, there is room to create concerted effort as they expand simultaneously (WWAP, 2015a). Amplifying water productivity of power plant cooling systems and boosting the ability of wind, solar, and geothermal energy will be a vital element in attaining a sustainable water supply in the future. The universal water requirement for the production industries is projected to rise by 400% from 2000 to 2050, topping the other sectors, with most of this growth taking place in developing economies and third world countries (WWAP, 2015a). Several large firms have made significant growth in assessing and dropping their water usage and that of their supply chains. Small and medium-sized companies are confronted with parallel water problems on a minor scale but have lesser ways and are capable of meeting them.

The adverse effects of climate change on freshwater systems will most likely overshadow its benefits. Recent predictions indicate that important variations in the sequential and spatial allocation of water resources and the rate and amount of water-related tragedies escalate substantially with the growing greenhouse gas releases (IPCC, 2014).

The difficulties that concern and surrounding water and sustainable development differ from region to region. The intention is for the African continent to attain a robust and pulsating contribution in the international community whereas still working on their natural and human capital exclusive of reiterating the adverse experiences while developing some regions. Presently just 5% of Africa's future water resources are developed and average per capita storage is 200 m³ (in comparison to 6,000 m³ in North America). Also, 5% of Africa's land is prepared for irrigation and a little over 10% of its hydropower potential is used to generate electricity (WWAP, 2015a). This has to be done under a united and cohesive system in order to ensure maximum productivity and the full reach of its potentials.

2.6 Challenges of SDG 6 in Nigeria

Nigeria is burdened by the numerous complexities in the WASH sector. Hence hampering the unhindered and universal connection to water and sanitary services by the population. These include the following.

- I. **Inconsistency in the WASH Policy:** Nigeria has been without a national water supply and sanitation policy (NWSSP) for so many years. This has to a tremendous degree contributed to the clumsy, vague, and disorganized nature of the WASH Sector. Akpabio (2012), states that nearly all the policies in the water and sanitation sector existed from 1989–2007, which concurred at the period when many of the global pronouncements and strategy decrees were made. It can thus be maintained that Nigeria's water and sanitation plans are unplanned instruments which occur essentially as a retort to disasters and external pressures as well as a partisan contribution by succeeding leaders to validate the presence and supposed performance (Akpabio 2012). Most of the guidelines that are germane to the problems in the water supply and sanitation, post-independence is the National Policy on Environment, 1989; NWSSP, 2000; National Rural Water Supply and Sanitation Policy, 2000; National Water Resources Management Policy, 2003; National Water and Sanitation Policy, 2004; National Economic Empowerment and Development Strategy 2003–2007; and National Environmental Sanitation Policy, 2005. It must be mentioned that these strategy brochures were

produced by the various agencies of the federal government, for instance, the Ministry of Water Resources and the Ministry of the Environment, which supports the clarification of the absence of incorporation and harmonization, creating loopholes for clash of the job description, duties and strategy path. This opinion is corroborated by Akpabio (2012), who stated that an investigation to the contents of the countless separate guidelines illustrates that majority of the policy contents are not meaningfully dissimilar from existing documents. The colonial way of delivering public drinking water to clogged town areas to date is still common in the policy area.

- II. **Absence of Autonomy:** Apart from the complexities of policy contradictions, most of the Water Boards or Water Corporation lack full independence as an effect of the government's incessant intrusion. The effect, it has restricted their ability and freedom in the areas of water pricing, hiring of staff, training, and staff discipline, amongst others. These statements are supported by Bello & Tuna (2014) in their review of safe water request and supply in some states in Nigeria, where they asserted that some State Water Board and its associated agencies, such as RUWASA and Ministry of Water Resources, lack full independence, i.e., absolute liberty to exert their control in the water sector and staffing. They similarly established that irregularities in government guidelines and political volatility are the foundation of a few of the difficulties. It was further noted that water policies are mostly modified by new governments, which also stresses the competence and the ability of the water resources in the States in Nigeria.
- III. **Corruption:** Corruption has remained very notorious as one of the leading consequences of scarce safe water supply globally and in Nigeria specifically. According to the Global Corruption Report 2008, mentioned in the findings of the First African Water Integrity Summit (FAWIS 2014), it was discovered that approximately US\$ 50 billion, which represents 25% of all water reserves, is lost annually to exploitation. Stalgren (2007), in his study of fraud in the water sector, detailed that the key cause of insufficient water supply is not the absence of a natural supply of water, nor is it principally an engineering challenge, i.e., resulting as an effect to the absence of practical resolutions. Rather, this universal water predicament is chiefly a catastrophe of governance. This is to ensure that the residents have connection to safe drinkable water and sanitary facilities. On the other hand, Mwanza (2013), cited in Babalobi (2013), defined corruption as a 'giant disease' weakening the conveyance of service in the water sector and accentuated the necessity for water honesty in order to decrease or get rid of fraud in the water techniques. He stated that except exploitation is successfully dealt with and curtailed in Nigeria's water supply and sanitation sector, the state water supply amenities will be incapable of delivering their vision of ensuring access to safe domestic water to Nigerians on a sustainable basis.
- IV. **Shortages in pipeline systems:** The public water supply is circulated through a water pipe system, which tends to impact on the quality and amount of water that gets to the clients if the veracity of the pipe delivery system is not guaranteed (Ohwo 2014); a delivery network pipes and storage services comprises of an intricate web of unrestricted physical, chemical and biological receptacles that can yield substantial dissimilarities in water quality. 'albeit the premise that well preserved recent treatment facilities for domestic water and safe water sources can distribute suitable water for human consumption, outdated, overused or poorly sustained delivery schemes can lead to the quality of pipe-borne drinking water to decline lower than the suitable levels and at such can cause grave health difficulties to those that patronize it' (Lee & Schwab 2005).
- V. **Lack of Reliable Data/Information:** This condition was emphasized in the Water Supply and Sanitation Temporary Tactic Note on Nigeria by the World Bank & Federal Ministry of Water Resources (2000). The report detailed that the State Water Agencies (SWAs) working productivity levels are extremely low as shown by the various yardsticks gathered in the National Water Rehabilitation Project. It discovered that various SWAs cannot afford satisfactory figures because of the absence of dependable information management structures, and for those answering, non-revenue or unaccounted-for water was extremely high, up to 63% noted for 1998 and 39% for 2013 (Macheve *et al.* 2015).

Furthermore, Precautionary care is barely performed, and insufficient funds have led to low investment in original and extended ability, as well as averting the intermittent replacement of the old pieces of machinery of the current infrastructure. Thus, SWAs are at present inept to match the present request for drinking water in their locations and states (World Bank & Federal Ministry of Water Resources 2000).

- VI. **The Challenge of Power supply:** Aderibegbe (2007) elucidates that the challenge of power supply has caused in the closing down of the public water supply for both domestic and commercial reasons, specifically in locations where pumping machines are connected, leading to a very grave difficulty in the water supply as the equipment is weakened. This condition has altered the water supply to the sinks in the kitchen, bathtubs, and toilets in a lot of residential areas and commercial properties. Hence, women and children are obligated to carry a collection of jerry cans, buckets, and drums in search of water from hand-dug wells, where the quality of the water is not certain.
- VII. **Nonexistence of good NGOs:** Even though there are good NGOs who have the competency and knowledge to do communal level organization and boost grassroots involvement, there are several NGOs that are known for their involvement in related work, but lack the needed ability to carry out their required roles. In effect, there is the nonexistence of satisfactory communal participation in place (different from what is documented), in systems where grassroots input is required (e.g., in watershed control, irrigation management, forestry administration, etc).

2.7 Nigeria Water Laws and Policies

Nigeria water laws and principles exist in many official gazettes (Akpabio, 2008). In addition to the Constitution of the Federal Republic of Nigeria, the subsequent and most important regulation on water and sanitation is the Water Resources Act 101 of 1993. This water act rests on the Federal Government of Nigeria via the Federal Ministry of Water Resources, the duties of regulation, Planning, and authorization of all the water operations in Nigeria. This takes into account the preparation, improvement, and treatment of Nigeria's water resources, making sure of the quality, quantity, delivery, consumption, and managing of water, safeguarding the use of applicable criteria and modus operandi for inquiry, guard, supervision, and management of water resources, aiding operational support and facelifts for water supplies, etc. (Adoga, 2006; Akpabio, 2007). The water-resources bill in Nigeria affords the regular water rights in association with utilizing household use, livestock farming, fishing, and irrigation.

Ramazzotti (2008), stresses that the Nigerian local water decree is not expressly pointed out in the Water Resources Declaration of 1993. In the law, any person may:

- Collect water devoid of any monetary value provided it is for household uses or for animal farming at any waterbed to which is unrestricted and there is free connection.
- Use water for fishing activities or for sea navigation
- collect and consume water from an underground water bed if he/ she has a legal authorization to such land, devoid of any rate for household uses, animal farming, and for private irrigation arrangements (not for profit).

In 1993, the Nigerian Water Resources Decree imposes the right to the use and control of surface and groundwater in the federal government for watercourses in more than one state. This is to support in planning promotion, development, and use of the country's water resources and confirming the application of suitable standards for analysis, use, control, protection, management, coordination, and distribution (Kuruk, 2004; Ramazzotti, 2008).

According to Akpabio (2007), the mechanisms and official papers that run and control water-assets in Nigeria are not satisfactory enough to decide on the matters of rulership, possession, administration, and safety of water resources. In his findings, it was perceived people who specialize in water and the supervisors are not directed by distinct or fixed philosophies and guidelines but by the code of conduct and administrative conclusions. This indicates that water resource administration will not tally to the main beliefs of necessities and fair play, therefore the appropriate organizations and establishments do not work for the collective aim of optimal ease of access and typical modus operandi.

Nigerian water law takes into account the Federal and State law, with all States of the Federation establishing a State Water Agency through its assisting law. The state laws here are rule-focused, making no allowance for multiple administration between the numerous water interests and fail to distinguish the prerequisites necessary for the participation of the interested party in the course of action, forecasting, and board decisions. Also, in the documented Federal and State law, there is a form of local regulations in the country. These local laws are not documented or collated but depend on the spoken way through which laws are passed from generation to generation. A Considerable amount of this law dwells on grassroots rights to water resources. In trying to save the situation, the Water Resources Act 1993, cap W2, LFN 2004, was propagated; but has a gap or nonexistence of a Monitoring and supervisory unit (Habu, 2014).

The constitution, however, has water supply on the concurrent legislative list, therefore making water supply management a responsibility of government at all stages, Federal, State, and Local Government.

2.8 Human Right to Water

The human right to clean water and sanitation has at present grown into a global issue. From Brazil to Sudan, Tibet to Turkana, water for existing is progressively turning out to be a steady dialogue. There is without a doubt that the opinion from various intellectuals and global organizations that access to safe, clean, or healthy water has gotten the importance as a fundamental human right. Take out water and life is a void. Wanting clean and healthy water for drinking and sanitation, the other human rights which are hinged on life are worthless. This view got to a high point in the year 2010, when the United Nations General Assembly voted for Resolution 64/292, evidently identifying the human right to water and sanitary services. The Resolution also accepted that hygienic domestic water and sanitary services are vital for the recognition of all human rights (Emeziem, 2015).

In international human rights laws, water is seen or viewed as a human right. The 1948 Universal Declaration of Human Rights embodies the 1966 International Covenant on Economic, Social and Cultural Rights, and the 1966 International Covenant on Civil and Political Rights. Although, water is not implicitly pointed out as such it exists as a human right. Nonetheless, it is inferred to employing other human rights such as the right to life, the right to an acceptable standard of living, and the right to health. In 2002, the United Nations formally embraced water as a human right. Article 15 of the General Statement of the International Covenant on Economic, Social and Cultural Rights posits that;

“The human right to water authorizes each person to satisfactory, nontoxic, adequate, substantially reachable, and inexpensive water for private and home uses.” This implies that the 145 nations that validated the International Covenant on Economic, Social, and Cultural Rights must make sure there is unbiased and equal access to safe drinking water” (SDWF, 2017).

Providing access to safe domestic water and sanitation for all is a legal responsibility. The human right to safe drinking water authorizes each person, devoid of segregation, to have connection to abundant, quality, adequate, physically reachable, and reasonably priced water for individual and domestic use. The human right to sanitation permits all individuals in all circles of life and from different backgrounds, devoid of discrimination, to have physical and easy connection to sanitation that is quality, clean, sheltered, publicly and ethnically suitable, and offers discretion and confirms self-respect. The Protocol on Water and Health also affords an all-encompassing structure for converting into a habit the human rights to water and sanitation. It will necessitate the Parties involved to have benchmarks and work out definite procedures to make sure of the gradual achievement of this goal. Article 5(l) of the Convention emphasized on;

“Unbiased access to water, sufficient in terms both of quantity and quality, ought to be delivered for all members of the population, particularly persons who undergo the pain of being at a drawback or social segregation”.

The Convention on Water and Health also works as a mechanism to implement the Sustainable Development Goals (SDGs), in particular provision of safe drinking water and sanitation for all (UNECE, 2017).

In 2011, the Nigerian government voted in the United Nations towards making water and sanitation a human right. However, it has not been accepted as a human right bill concerning water and sanitation in the national law. The Right-based approach (RBA) empowers everybody to have access to adequate, not contaminated,

satisfactory, substantially available, and reasonably priced water for necessary private and home usage. This entitlement likewise means that every individual ought to have access to the data and statistics on water and sanitation topics and hygiene promotion. As a result, the significant components of RBA is to ensure that access to water is safe and very suitable, reachable facilities, appropriate magnitude. Lack of these crucial basics connotes scarcity in water right of use. It also suggests loss of water security which leads to scarcity (Swiss Agency for Development and Cooperation, SADC, 2008).

According to UNDP (2006) 'water security is centered on making sure every individual has consistent and dependable access to adequate and safe water at a reasonable price to lead a strong, dignified and fruitful life whilst preserving the environmental arrangement that is responsible for water and also is influenced by water. The UN (2008) posits that the lack of water is calculated by the physical water insufficiency which takes place when 75 percent of river movements are taken away and where the economic water scarcity where human, institutional and financial capital restricts connection to water, even though water is naturally obtainable. It further states that water lack leads to water poverty, water worry, or water uncertainty. Water scarcity according to Cook and Gichuki (2006) refers to a lack of good welfare attributable to water. It is stated that WHO and UNICEF set the least prerequisite of 20 liters a day from a source, not above 1 km from the domestic residence. The 20 liters are adequate for drinking and basic hygiene. Lower than this level, individuals will be forced and in capitated in their capacity to sustain their physical health and self-respect that come with being clean (UNDP, 2006).

METHODOLOGY

This study will focus on finding out if Sustainable Development Goal 6 which is complete connection to water and sanitary services has been implemented in Ado-Odo/Ota Local Government Area in Ogun State.

3.1 Research Design

This Research design will make employ survey design because questions will be asked from respondents, questionnaires through the form of google docs will be distributed to the people in Ado Odo/Ota LGA of Ogun State. Also, interviews will be conducted with selected experts in WASH, Ogun State Water Corporation, and Public Health Experts within the locality. Furthermore, focus group discussions will be carried out amongst the people in the Local Government Area.

The cross-sectional survey design also enabled the researcher to collect data and draw inferences through the administration of a controlled questionnaire to the population under study at a point in time to determine the relationship that exists between the Implementation of SDG 6 and the residents in Ado/Odo Ota Local Government Area in Ogun State.

3.1.2 Sampling Technique

The Sampling technique used in this research is random sampling. This is to collect different views from the residence in Ado Odo/Ota LGA of Ogun State.

3.1.3 Sources of Data

The required data for this work will involve the use of both primary and secondary sources of data. This is a result of the combination of questionnaires, interviews, research journals, published and unpublished work, online sources, and focus group discussions.

3.1.4 Sample Size

A total of five (5) people were selected to be interviewed for this study. The sample size was purposively drawn from the following areas; Ogun State Water Corporation, experts in WASH, and Lecturers in the Higher Institutions in Ota promoting WASH.

The five key people interviewed for the work are:

- Professor David Olukanni, Faculty Member, Covenant University, Ota, Department of Water Engineering

- Professor David Omole, Faculty Member, Covenant University, Ota, Department of Water Engineering
- Dr. Muyiwa Oladosu Faculty Member, Covenant University, Ota, Consultant and Research Analyst
- Mr. Adebayo Alao , Head of Services, WaterAid Nigeria
- Engr. Adesanwo , Consultant to European Union on Water and Sanitation (Ogun State Water Corporation)

Also, using the sample size determination formula by Taro Yamane for a population of 527,242 at a 95% confidence level and 5% margin error, the sample size will be.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n signifies the sample size

N signifies the population under study

e signifies the margin error

$$n = \frac{527,242}{1 + 527,242(0.05)^2}$$

$$n = \frac{527,242}{1 + 527,242(0.0025)}$$

$$n = \frac{527,242}{1319}$$

$$n = 399.7 \text{ or } 400$$

Taro Yamane's formula represents the minimum number of responses to be obtained from the total population. For this reason, the sample size for this study is 400 respondents because of the probability of unreturned questionnaires.

3.1.5 Method of Data Collection

The method of data collection employed in this work is the mixed method. By implication, it will make use of both the quantitative and qualitative methods of research which will include the use of questionnaires, interviews, focus group discussions, documents, and records. A total of four hundred questionnaires were intended to be distributed in the course of this work to the people and the residence in Ado- Odo/Ota LGA in Ogun State. However, the COVID 19 pandemic caused a lot of restrictions thereby making the researcher rely on distribution via the form on a google document.

3.1.6 Reliability and Validity of Research Instrument

To establish the validity of the instruments, the content validity was implemented by exposing it to analysis in phrasing, content, question construct and prejudice before its submission from the project supervisor in the Department of Political Science and International Relations and other authorities in the field for an in-depth examination. To confirm the reliability of the questionnaire, questions raised were gathered from existing writings such as publications, journals, articles, etc. and was permitted by the supervisor.

3.1.7 Data Analysis Technique

A combination of the thematic and descriptive statistical techniques will be used in analyzing the data. This is because it describes the main aspect of this research data through field surveys. Also, a combination of statistical tools such as frequency and percentages were used to give a visual understanding of the whole value. The research propositions raised were also tested.

3.1.8 Population of Study

The population of this study comprises Public Health experts, Civil Servants, WASH advocates, lecturers, and WASH experts in the LGA. These categories of people will be selected for this research because of their knowledge and experiences in the promotion of Water, Sanitation, and Hygiene Ado- Odo/Ota LGA in Ogun State.

3.2 The Evolution of the WASH Sector in Nigeria

Developments of water supply around the city areas of Nigeria can be drawn to the colonial years when two primary authorities, specifically: the Public Works Department (PWD) and the local administration water

schemes, were in charge of the water supply. A significant problem in the provision of water supply was chiefly accredited to the economic depression of the 1930s, which influenced both the designing and financing of water supply schemes. Therefore, only cities with monetary ability were reflected in the establishment of water supply arrangements (Akpen, 2005).

Mabogunje (1965) also appraised the design of water resources development in Nigeria, particularly during the colonial era. He opined that one of the essential and important goals of water supply development throughout the colonial era was 'to enhance the quality of drinking water and also diminish devastating outcome of water-borne sicknesses on the populace. Because of the financial restrictions nonetheless, this development was concerted in selected centers situated along the important trade and transportation routes attending to the export-oriented colonial economy. The first contemporary water supply scheme in the country was developed in Lagos in 1915 and by 1953, about 30 other waterworks had been constructed in different parts of the country. Only a few of these water schemes were fully funded by the colonial government, the others were partly paid for by the local authorities. Between 1953 and 1960, the number of cities having modern water supplies expanded from 28 to 67. The total water used per day also rose from about 13.8 million gallons in 1953 to over 57 million gallons in 1960. The volume of water used as well as the number of water schemes has been growing at remarkable level; since then. Nearby streams and springs could no longer meet the desires of the expanding populations in the urban areas. Thus, this resulted in other means of water being hunted for in bigger rivers situated farther away from these centers (Ayoade, 1975).

In the First National Development Plan covering the period 1962-1968, the total distribution of water supply was N48.6 million or about 3.6 percent of the total calculated capital expenditure in the public sector. The actual capital expenditure on water supply during this period was N49.4 million or 4.4 percent of the total actual use. In the Second National Development Plan (1970-1975) that started following the civil war, N103.4 million or 5 percent of the total expenditure for the plan period was assigned to water supply and provision of modern sewerage systems for Ibadan and Lagos. There were however certain disparities from state to state in the allocation of total expenditure allocated for water resources development. The figures went from 20 percent in North Central State to 6.9 percent in the South Eastern State. In the Third National Development Plan (1975-1980), N930.038 million or 2.8 percent of the total planned expenditure in the public sector has been allocated for water supply schemes. The reduction in the allocation of total expenditure budgeted for water supply schemes is to be condemned. This is based on the premise that Nigeria's per capita expenditure on this essential resource is still very low, and do not compete favorably with the given situations even in more developed countries where pipe-borne water is already a necessary infrastructure. It should be gathered that suitable and readily accessible pipe-borne water supply is not only a public amenity but also an essential factor for production. In the rural areas of Nigeria, water is still the most wanted and desired service and it is placed very highly on the people's scale of developmental choices. Therefore, the beginning in present years of self-help water schemes i.e. boreholes in smaller towns and villages intended at bringing this essential good in stress-free grasp of the people (Ayoade, 1975).

On the other hand, the development of Nigeria's water resources is still very clumsy. The delivery of water supply for domestic and industrial use as well as satisfactory sanitary and hygiene amenities were principally the obligation of both the three levels and the three arms of government. The different states now have water boards or corporations vested with the duty of the set-up and maintenance of water supply schemes in the state involved as well as the provision of water to those areas which currently do not have the modern water supply and sanitation facilities. Also, other agencies have been set up to improve the administration of water resources in Nigeria. These agencies are the National Water Institute, Agricultural Development Projects (ARDP), National Council on Water Resources, etc. Some international organizations have also been known to contribute to loans and grants for the growth of the water sector in Nigeria. International Organizations like the World Bank and the African Development Bank have been very instrumental in this regard (Uchechukwu, 2017).

3.3 Historical Background of Water, Sanitation, and Hygiene Policy in Nigeria

Nigeria's first draft Water Resources Policy was drafted in the year 2004 after the National Water Resources Master Plan studies in 1984 and 1993, the formulation of the Water Resources Decree 101 (Water Act 100 of the Federal Republic of Nigeria) of 1993, and the present Water Resources Management Sector Reform Programme which began in 1999. The 2004 draft policy was based on the beliefs and ideologies of the Integrated Water Resource Management (IWRM) and notwithstanding the successive reviewing, it was submitted to the Federal Executive Council for endorsement. This reviewed draft policy document takes into consideration the recent developments in the sector including the evaluation of the 1993 Water Resources Master Plan and the current Water Resources Master Plan prepared in 2013 (FMWR, 2015).

The fundamental belief or ideologies of this policy is that Nigerians must change the way they interpret water owing to the fact that water is a very vital instrument in the socio-economic growth of any nation. This is because it has direct consequences on the health of the population, very useful in preserving the environment as well as international development (i.e. global initiatives such as Sustainable Development Goals (SDG's) and other poverty reduction plans and processes). Water should also be understood as a threatened product that has real importance which must as a matter of urgency be sustainably maintained. There are therefore two most important and key goals of this strategy which are (i) safeguarding and promoting the quality of the nation's water resources; (ii) enhancing the judicious and effective management and use of water. Water is both a significant driver of a nation's economic and social development. It is also a very vital natural resource and challenges in water mustn't be deliberated independently.

The Water Resources Policy of Nigeria is a testimonial to the Government's beliefs and ideal for the country's freshwater and possibly marine water resources comprising of its approaches for attaining its defined and planned vision. In Nigeria, water is the most significant natural resource the country has (not petroleum as usually misunderstood) and is sadly the most unappreciated, wasted, and most abandoned natural resource. Every region in Nigeria has an abundance of fresh water both in quantity and quality. Unfortunately, this has been constantly abused, misused, and mismanaged for decades without any severe penalties arising. Water scarcity together with misuse of the accessible resources impedes Nigeria's sustainable development. Rapid economic and population explosion has resulted to the over-commitment of available surface water resources, overexploitation of groundwater resources in many areas, and unpredictable connection to water – jointly disrupting the livelihood of many, especially the people in the rural areas and the poor people habiting in the "Sahelian" northern Nigeria (Oyebande, 2015).

3.3.1 Water Sanitation and Hygiene Policy in Nigeria before 2015

In Nigeria, various program strategies for water resource management exist only at the federal level (Adeoti 2007). Some of these policies related to water resources and sanitation include the 1989 National Policy on Environment, the 1993 Water Resources Decree no. 101, the Rural Water Supply and Sanitation Policy 2000, the National Water Supply and Sanitation Policy 2000, the National Water Resources Management Policy 2003, and the National Water Sanitation Policy 2004. The National Policy on Environment of 1989, in the field of water resources management, identifies catchment river basins as the component or element of examination in the management of water and even controls water quality guidelines and pollution control. The River Basin Development Authorities (RBDAs) are sub-agencies under the Federal Ministry of Agriculture and Water Resources and are vests with the development, operation, and management of reservoirs and other hydraulic infrastructure within their basin area, with the development of both surface and groundwater resources highlighting on the provision of bulk water for irrigation and drinking purposes in their basin area, and also with the development of an all-inclusive water resources master plan (FMWR, 2003). Enacted in 1993, the Water Resources Decree no. 101 states that water is owned by the nation, managed and controlled by the Federal Government through the Federal Ministry of Water Resources. The Rural Water Supply and Sanitation Policy of 2000 emphasize on matters about rural water supply and sanitation and entrusts more responsibilities to the rural communities with the sole objective of supporting every rural community with the ability to obtain drinking water means and making sure support is given to

the public that are equipped to manage their means or sources; increasing the volume of local, state and federal governments to support the public in achieving essential water supply source that the public themselves can maintain with support from the private participation; increasing state's volume of the private sector at the state and local level to construct high-quality boreholes, wells, and latrines and to renovates water supply infrastructures; as well as supplementing the National Principal Healthcare Programme by endorsing improved health routines, centering on heathy water, good sanitary, diarrhea prevention, and appropriate human feces removal. While the National Water Supply and Sanitation Policy (NWSSP) of 2000 emphases on provisions involving providing drinkable water and acceptable sanitary services to all Nigerians in an inexpensive and sustainable manner through participatory investment by the three tiers of government, i.e. federal, state and local governments, the private sector and the recipients, the essential elements of the NWSSP 2000 include the following: Increase service coverage for water supply and sanitation across the country to meet the degree of the nation's financial request in the sector; Confirm great water quality norms are protected by water supply endeavors; Ensure affordability of water supply and sanitation services for the citizens; Guarantee affordable access for the poor to basic human need level of water supply and sanitation services; Enhance national capacity in the operation and management of water supply and sanitation undertaking; Privatize water supply and wastewater services (where achievable) with satisfactory protection for the poor; Monitor the performance of the sector for sound policy modification and improvement; Legislation, guidelines and principles for water supply and sanitation; and Reform the water and sanitation sector to accomplish and preserve internationally satisfactory standards (FMWR, 2000).

Furthermore, the National Water Policy (NWP) 2004 identifies the requirement of balancing water routines, water distribution, and water security judiciously through a monitoring structure of river basin-based organization and participatory method. This represents a radical move in the way that the water sector will be managed in Nigeria, rejecting the top-down approach and looking to implement, for the first time, an integrated, demand-driven approach and effective management of this resource. As the NWP recognizes, there has been no water resource management in Nigeria to this point, only a top-down, supply-driven, development of water resources. This has led to investments that have not been efficiently used, representing a major wastage of government funding which continues until today (FMWR, 2014).

3.4 Description of the Study Area

Ado – Odo/Ota has an area of 878km² and its headquarters is in Ota which borders on the Lagos metropolis. It has a population of 527,242 (Male 261,523 and female 265,719) as shown by the last population census in 2006 with about 450 towns, villages, and settlements. It is made up of prominent towns like Ado-Odo, Agabara, Igbesa, Iju-Ota, Itele, Owode, and Sango Ota. Also, the local government area is significant for the situation of many industries such as Indomie, Durfill, and tertiary institutions like Covenant University, Bells University just to mention a few.

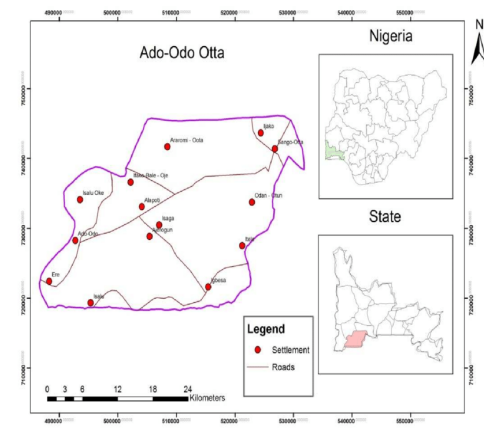


Figure 1: Map of Ado-Odo Otta Local Government Area in Ogun State
(Ogunyemi et al, 2017).

DATA PRESENTATION AND ANALYSIS

This chapter presents the data analysis for this work. It will employ the primary and secondary sources of data. The primary sources of data for this work were drawn from well-thought-out and in-depth discussions with experts in the WASH Sector. These discussions were aimed at providing answers to the research propositions highlighted in Chapter One of the work. Also, a total of three hundred and ninety-two responses were gotten from the questionnaires that were admitted through the guided use of google documents to the residents of Ado/Odo Ota LGA in Ogun state as well as email and zoom interviews were conducted with lecturers from Covenant University, Experts and professionals in Ogun State Water Corporation and the WASH sector in the Ado/Odo Ota Local Government Area in Ogun State. Secondary data were collected, which were then used to supplement the data from the primary source that was collated. The data is presented thematically to answer the research questions and address the propositions of the study.

4.1 Background Information of the Respondents

The background information of the respondents is obtainable in this section. The biodata of the respondents that were analyzed includes their age, marital status, gender, and residence in Ado/Odo Ota Local Government Area in Ogun State.

Table 4.1: Gender Distribution of Respondents

Source:

	Gender	Frequency	Percent
Valid	Female	197	50.3
	Male	195	49.7
	Total	392	100.0

Fieldwork 2020

Interpretation: Table 4.1 is the distribution of respondents according to their gender. The table shows that 50.3% of the respondents are female while 49.7% are male. This demonstrates that the bulk of the respondents are female.

Table 4.2: Distribution of Respondents Age

	Age Bracket	Frequency	Percent
Valid	18 – 25	342	87.2
	26 – 40	36	9.2
	41 – 55	14	3.6
	Total	392	100.0

Source: Fieldwork 2020

Interpretation: Table 4.2 above indicates that the ages between 18 – 25 years represent 87.2% of the total respondents while those between 26 -40 years old account for 9.2%. Also, ages 41 – 55 constitute about 3.6% of the respondents. This shows that the age range 18 – 25 years constitute the highest and the large number of the respondents.

Table 4.3: Distribution of Respondents by Marital Status

Marital Status		Frequency	Percent
Valid	Married	29	7.4
	Separated	2	.5
	Single	361	92.1
	Total	392	100.0

Source: Fieldwork 2020

Interpretation: The respondent distribution for marital status as shown in table 4.3 above indicates that respondents that are single account for 92.1% of the total respondents. Furthermore, the married population shows 7.4% while the separated respondents are 0.5%. This indicates that most of the respondents are single.

Table 4.4: Distribution of Respondents by Occupation

Occupation		Frequency	Percent
Valid	Business owner	29	7.4
	Corper	4	1.0
	Government worker	16	4.1
	Private Sector	19	4.8
	Student	322	82.1
	Trader	2	.5
	Total	392	100.0

Source: Fieldwork 2020

Interpretation: Table 4.4 shows the distribution of respondents according to their occupation. As shown by the table above, 82.1% of the respondents are students while the business owners constitute 7.4%. The private sector accounts for 4.8% and the government worker makes up for 4.1%. Corpers make up 1.0% and traders make up 0.5%. From the above, students make up the majority of the respondents by the occupation.

Table 4.5: Frequency distribution showing people resident in Ota

Resident in Ota?		Frequency	Percent
Valid	No	37	9.4
	Yes	355	90.6
	Total	392	100.0

Source: Fieldwork 2020

Interpretation: From table 4.5 that shows the frequency distribution showing respondents resident in Ado/Odo Ota Local Government Area, 90.6% represents the number of the respondents that are resident in Ado/Odo Ota Local Government Area in Ogun State while 9.4% indicates the number that is not resident in Ado/Odo Ota Local Government Area in Ogun State. Hence, the Yes make up the majority that resides in Ado/Odo Ota Local Government Area.

4.3 Universal Access to Safe Water and Sanitation

This section presents the data gathered from the respondents on the extent to which the Implementation, enhancement, and promotion of SDG 6 have improved the access to healthy, clean, and portable water and sanitation in Ado/Odo Ota, Local Government Area. The respondents were asked some questions on how the Implementation of SDG 6 has enhanced the quality of access to clean water and good sanitation facilities in Ado/Odo Ota LGA of Ogun State. Their responses are presented with a frequency distribution table and calculation.

Awareness of clean, portable, and healthy Water, good Sanitation, and Hygiene facilities

Awareness of Water, Sanitation, and Hygiene facilities	Frequency		Percent	
	No	141	36.0	
	Yes	251	64.0	

Source: Field Work (2020)

The frequency table shows that 141 (i.e. 36.0%) of the respondents are not aware of healthy, clean, and portable Water, good Sanitation, and Hygiene facilities while 251 (i.e. 64.0%) of the respondents are aware of Universal access to water and sanitation. Hence, it represents the majority of the respondents that participated in this study.

Table 4.6: Frequency table showing Universal Access to Water and Sanitation

Universal Access to Water and Sanitation	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
The Water, Sanitation and Hygiene policy is being implemented in Ado/Odo-Ota	150	38.3	0	0	45	11.5	146	37.2	51	13.0
Residents in Ado/Odo-Ota have connection to safe water, sanitation and hygiene facilities	217	55.4	0	0	28	7.1	131	33.4	16	4.1
Water, Sanitation and Hygiene is important for all	70	17.9	0	0	36	9.2	216	55.1	70	17.9

Source: Fieldwork 2020

This area presents and interprets the data regarding the implementation of the universal access to water and sanitation policy in Ado/Odo Ota. The first row indicates that 38.3% of the respondents strongly agree to the fact that water, sanitation, and hygiene is being implemented in Ado/Odo Ota LGA, While 0% disagree, 11.5% of the participants are neutral on the implementation of SDG 6, 37.2% agree to the implementation of the goal and 13.0% strongly agree that the WASH policy is implemented in Ado/Odo Ota. This demonstrates that the majority of the participants strongly disagree with the fact that the WASH policy is being implemented in the Ado/Odo Ota local government area of Ogun State.

In the second row, 55.4% strongly disagree to the fact that residents in Ado/Odo Ota have access to safe water, sanitation, and hygiene facilities while 0% disagree to this fact, 7.1% of the participants indicate that the residents have access to safe water, sanitation and hygiene facilities, 33.4% represents the participants that agree to the residents having access to WASH facilities and 4.1% of the participants strongly agree to it. Therefore, the majority point toward the fact that the residents in Ado/Odo Ota do not have access to safe water, sanitation, and hygiene facilities.

The third row represents the participant's views on the importance of WASH for all. From the interpretation of the data, 17.9% of the respondents strongly disagree, 0% disagree, 9.2% are neutral, 55.1% agree while 17.9% strongly agree. Thus, the majority of the respondents agree that WASH is important for all. Therefore, the assessments and thoughts of the participants in this study point to and concludes that the WASH policy has not been implemented in Ado/Odo Ota Local Government Area in Ogun State.

4.4 Implementation of Sustainable Development Goal (6)

One of the objectives of the study is to examine the Implementation of SDG 6. Hence, this section provides the data in this regard. It represents and interprets the data that was collected and analyzed from participants in Ado/Odo Ota local government Area. The participants were asked some questions on the Implementation

of sustainable development goal 6. Their responses are presented with a frequency distribution table and calculation. They are noted as follows;

Implementation of Sustainable Development Goal (6)	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
SDG (6) has been promoted/domesticated in Ado/Odo-Ota	179	45.7	0	0	53	13.5	125	31.9	35	8.9
Promoting SDG (6) is important for the socio-economic development of Ado/Odo-Ota	58	14.8	0	0	19	4.8	223	56.9	92	23.5
Residents of Ado/Odo-Ota benefit maximally from safe water and sanitation as a result of the Implementation of SDG (6)	158	40.3	0	0	33	8.4	146	37.2	55	14.0

Table 4.7: Frequency table showing Implementation of Sustainable Development Goal (6)
Source: Fieldwork 2020

Table 4.7 represents the frequency table showing the Implementation or the promotion of sustainable development goal 6. In the first row, 45.7 % of the participants strongly disagree with the fact that SDG 6 has been promoted/domesticated in Ado/Odo Ota while 0% of the population disagree. 13.5% of the participants remain neutral. 31.9% agree and 8.9% of the population strongly agree that SDG 6 has been Implementation/promoted in Ado/Odo Ota local government Area of Ogun State. Hence, 45.7% of the population which are the majority do not agree that SDG (6) has been promoted/domesticated in Ado/Odo-Ota

The second row shows that 14.8% of the participants strongly disagree that promoting SDG 6 is important for the socio-economic development of Ado/Odo Ota local government area in Ogun State. 0% disagree while 4.8% of the respondents are neutral to Promoting SDG (6) is important for the socio-economic development, 56.9% of the participants agree and 23.5% of the participants strongly agree that promoting SDG (6) is important for the socio-economic development of the. Therefore, 56.9% which make up the majority of the respondents agree that Promoting SDG (6) is important for the socio-economic development of Ado/Odo-Ota.

In the third row, 37.2% of the people that participated in the survey strongly disagree that the residents of Ado/Odo-Ota benefit maximally from safe water and sanitation as a result of the Implementation of SDG (6). While 0% disagree in this regard, 8.4% are neutral. 40.3% of the persons involved agree that the residents of Ado/Odo-Ota benefit maximally from safe water and sanitation as a result of the Implementation of SDG (6) while 14.0% strongly agree. Therefore, the majority which is 40.3% of the participants strongly disagree that the residents of Ado/Odo-Ota benefit maximally from safe water and sanitation as a result of the Implementation of SDG (6)

4.5 Challenges affecting the implementation of universal access to safe water and sanitation.

Amongst other things, this study set out to examine the challenges affecting the implementation of universal access to safe, portable, and healthy water, good sanitation, and hygiene facilities. Therefore, this section provides the outcome and the representation of the field survey in this regard.

Table 4.8: Frequency table showing challenges affecting the implementation of Sustainable Development Goal 6

Challenges affecting the implementation of universal access to safe water and sanitation	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
Lack of finance or funding is a major hindrance to the implementation of universal access to safe water and sanitation	30	7.7	0	0	2	.5	180	45.9	180	45.9
Lack of political will negatively affects the implementation	70	17.9	0	0	36	9.2	216	55.1	70	17.9
Bribery and corruption is another major challenge to implementation	19	4.8	0	0	0	0	208	53.1	165	42.1

Source: Fieldwork 2020

In Table 4.8, the frequency table indicates that 7.7 % of the respondents strongly disagree lack of finance or funding is a major hindrance to the implementation of universal access to safe water and sanitation. 0% disagree, while 0.5% remain neutral 45.9% of the people that participated agree that lack of finance or funding is a major hindrance to the implementation of universal access to safe water and sanitation and 45.9% strongly agree to the lack of finance or funding is a major hindrance to the implementation of universal access to safe water and sanitation. Thus, the bulk is 45.9% of the respondents that agree and strongly agree Lack of political will negatively affect implementation.

On the second row, 17.9% strongly disagree with the lack of political will negatively affect implementation. While 0% disagree, 9.2% of the people are neutral. 55.1% of the population agree to Lack of political will negatively affect the implementation and 17.9% strongly agree. The population that makes up the majority are the people that agree to Lack of political will negatively affect the implementation of Goal 6.

For the third row, 4.8% strongly disagree bribery and corruption is another major challenge to the implementation of Goal 6. 0% disagree, 0% are neutral but 53.1% agree that Bribery and corruption is another major challenge to implementation to Goal and 42.1% strongly agree. So, the bulk of the respondent agrees that bribery and corruption is another major challenge to the implementation of Goal 6.

4.6 Solutions to enhance implementation of universal safe water and sanitation

This section presents the data gathered from the participants on the solutions to enhance the implementation of universal safe water and sanitation. The participants were asked different questions on sustainable solutions and strategies in this respect. Their responses are presented with a frequency distribution table and percentile.

Table 4.9 Frequency table showing solutions to enhance implementation of universal access to safe water and sanitation

Solutions to enhance implementation of universal access to safe water and sanitation	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
Adequate funding will enhance implementation of universal access to safe water and sanitation	18	4.6	0	0	6	1.5	168	42.9	200	51.0
Government should give more attention to it	47	12.0	0	0	0	0	149	38.0	196	50.0

There is a need for increased and continuous awareness and sensitization on the importance of Water, Sanitation, and Hygiene	19	4.8	58	14.8	6	1.5	92	23.5	223	56.9
There is need for a more effective institution or agency to ensure and enforce implementation	13	3.3	0	0	76	19.4	43	11.0	260	66.3

Source: Fieldwork 2020

In Table 4.9, the first row, findings indicate that 4.6% of the respondents strongly agree adequate funding will enhance the implementation of universal access to safe water and sanitation whilst 0% disagree, 1.5% of the participants are neutral. Then, 42.9% of the people that participated in this study agree adequate funding will enhance the implementation of universal access to safe water and sanitation and 51.0% strongly agree adequate funding will enhance the implementation of universal access to safe water and sanitation. Hence, making the majority - 51.0% of the participants.

The second row presents the data on the need for the Government should give more attention to the implementation of Goal 6. From the data, 12% strongly disagree, 0% disagree and 0% are neutral but 38% agree the government should give more attention to the implementation of Goal 6. And 50% strongly agree the government should give more attention to the implementation of Goal 6. Therefore, the majority of the participants strongly agree that the government should give more attention to the implementation of Goal 6. For the third row, increased and continuous awareness and sensitization on the importance of Water, Sanitation, and Hygiene. Findings reveal that 4.8% of the participants strongly disagree that increased and continuous awareness and sensitization on the importance of Water, Sanitation, and Hygiene, 14.8% disagree, 1.5% are neutral 23.5 agree and 56.9 strongly agree that increased and continuous awareness and sensitization on the importance of Water, Sanitation, and Hygiene. This shows that the majority of the respondents strongly agree that increased and continuous awareness and sensitization on the importance of Water, Sanitation, and Hygiene.

In the fourth row, the outcome of need for a more effective institution or agency to ensure and enforce implementation according to the responses from the participants' states as follows; 3.3% of the people strongly disagree to need for a more effective institution or agency to ensure and enforce implementation, 0% disagree 19.4% are neutral, 11 % agree and 66.3% strongly agree. Therefore, the majority of the participants strongly agree to the need for a more effective institution or agency to ensure and enforce implementation.

4.7 Test of Hypotheses

4.7.1 Hypothesis One: Implementation of SDG 6 has not significantly improved the universal access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State.

Model Summary

Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	.947 ^a	.0782	.965	.52887

a. **Predictors:** (Constant), Implementation of SDG (6)

b. **Dependent Variable:** Improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State.

Interpretation: The model summary table above shows the relationship between the independent variable i.e, Implementation of SDG (6), and the dependent variable Improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State. The R-value shows the correlation and is 0.947. The R square value shows the extent of the total variation in the dependent variable (Improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State) is explained by the independent variable (Implementation of SDG (6)). In this case, a very small 11.4% can be described. This is insignificant.

ANOVA^a

Model	Sum of squares	df	Mean Square	F	Sig.
Regression	327.368	4	97.623	2.604	.321 ^b
Residual	82.632	215	.401		
Total	410.000	219			

a. **Dependent variable:** Implementation of SDG (6)

b. **Predictors:** (Constant), Improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State.

The analysis of Variance (ANOVA) table above shows that the regression model does not significantly determine the dependent variable - Improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State. The P-Value is 0.321 and the F-cal is 2.604. This is more than the conventional significance level of 0.05 (i.e., $P > 0.05$). This result is not statistically significant showing that overall, the independent variable does not significantly predict the dependent variable. In order words, the Implementation of SDG (6) has not significantly improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	-2.634	.529		-7.523	.234
Implementation of SDG (6)	.277	.098	.498	7.491	
The government should give more attention to it					.1406
There is a need for awareness and sensitization on	.465	.072	.467	6.854	

Universal Access to Water and Sanitation	.640	.423	0.52	1.724	.631
					.810

a. Dependent variable: Improved access to safe water and sanitation in Ado/Odo Ota Local Government Area of Ogun State

The Coefficients table above further provides necessary information about the extent of the contribution of each of the constructs of the independent variable to predict the dependent variable. These constructs are the government should give more attention to the implementation of Goal 6. None of these constructs significantly determine the dependent variable.

Decision: Since the independent variable did not significantly predict the dependent variable. The null hypothesis is upheld that the Implementation of SDG (6) has not significantly improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State.

This result is also supported by the findings from the interviews conducted. The interviews show that the Implementation of SDG (6) has not significantly improved access to safe water and sanitation in Ado/Odo Ota Local government Area of Ogun State. Interview conducted with Prof Omole and Engr. Kamil Okedara reveals that access to safe water and sanitation has not been implemented in Ado/Odo Ota Local government Area of Ogun State because of the government's lack of attention to it, overlapping policies and laws, no effective institution or agency to enforce implementation, bribery and corruption and lack of awareness and sensitization.

4.7.2 Hypothesis Two: The Universal Access to safe water and sanitation has not been implemented in Ado/Odo Ota Local Government Area in Ogun State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 ^a	0.891	0.885	.59972

a. Predictors: (Constant), has not been implemented

Interpretation:

ANOVA^a

Model	Sum of squares	df	Mean Square	F	Sig.
Regression 1	378.625	5	78.250	2.830	.106 ^b
Residual	31.375	214	.296		
Total	410.000	219			

A). Dependent variable: has not been implemented in Ado/Odo Ota Local Government Area in Ogun State, Implementation of the Water, Sanitation and Hygiene policy

There is a need for effective institution or agency to ensure and enforce the implementation
 The government should give attention to it
 There is a need for awareness and sensitization on Universal Access to Water and Sanitation
 b. **Predictors:** (Constant), Implementation of SDG (6)

The Analysis of Variance (ANOVA) table above shows the position of the independent variable on the dependent variable. The P-Value is 0.106 and the associated F-cal is 2.830. This is more than the conventional significance level of 0.05 (ie. $P > 0.05$). this result is not statistically significant showing that overall, the independent variables which make up does not significantly determine the dependent variables – has not been implemented in Ado/Odo Ota Local Government Area in Ogun State.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	-1.385	.169		8.249	.100
Implementation of the Water, Sanitation and Hygiene policy	.680	.167	.652	4.821	.351
1 There is a need for effective institution or agency to ensure and enforce the implementation	.536	.142	-0.59	-526	.504
	0.75	0.83	.354	6.864	.618
The government should give attention to it.	.408	0.65	.272	4.841	.540
There is a need for awareness and sensitization on Universal Access to Water and Sanitation					

4.7.3 Hypothesis Three: The inability to access funding/Finance is not a significant hindrance in the implementation of the universal access to safe water and sanitation in Ado/Odo Ota local government Area in Ogun State.

The conclusions from the interview conducted were used to test the acceptance or the rejection of hypothesis three. According to Mr. Aloa an expert in WASH, one of the major hindrances to the implementation of universal access to safe water and sanitation in Ado/Odo Ota local government Area in Ogun State is a lack of funding of the projects that will spearhead connection to suitable water supply by the residents. The interview conducted further reveals that although there is a budgetary allocation alongside foreign interventions in the forms of loans and aid from international institutions like the World Bank, EU, AfDB, etc. it is not sufficient to actualize this goal because of corruption that is prevalent in the sector. Hence, money meant for these projects is diverted into personal pockets and accounts or even misused without accountability. This makes the cost of clean water high. Based on the information provided from the interview. Hypothesis three is rejected and the bull hypothesis is upheld, therefore, inability to access

funding/Finance is not a significant hindrance in the implementation of the universal access to safe water and sanitation in Ado/Odo Ota local government Area in Ogun State

DISCUSSION

This chapter will present the scrutinized data obtained from both the primary and secondary sources. Different data was gathered through interviews with some experts in the WASH sector and thematic analysis of conducted by reviewing different publications that authors have done in respect to the Implementation of SDG 6 which is the accessibility of healthy and portable Water, good sanitation, and Hygiene in Ado/Odo Ota LGA of Ogun State.

5.1 Discussion of Findings

Findings indicate that Implementation of SDG 6 - Universal access to healthy, portable, and affordable water, good Sanitation, and Hygiene facilities has not been implemented in Ado/Odo Ota. LGA of Ogun State.

The findings further show that there is no significant access to Water, good sanitation, and hygiene facilities in the locality. This is evident in the surge in the rate of water-borne diseases, cases of COVID 19, open defecation, absence of public toilets, houses without clean and healthy water, and people resorting to walking long distances in search for water, etc. Thus, it has impeded the development of the state, increase in recorded deaths, dirty and unhygienic environments and conditions as well as heavily polluted water bodies.

Furthermore, most schools, public places such as markets, churches, etc. lack basic handwashing facilities. Despite the grave implications of the absence of this, which is illustrated particularly in the high rate of people infected with COVID 19, most people do not have access to this very essential amenity. Again, female students will have to miss schools, classes, professionals skipping work, etc. because menstrual hygiene is a challenge that impacts on the socio-economic development of the society and the nation at large.

Other factors impeding the achievement of Goal 6 include; lack of political will by the ruling class, challenges of implementation of the policy in the WASH sector, no awareness and sensitization on the importance of WASH, nepotism, lack of funding and investments, feelings of hopelessness by the people, embezzlement of funds and inadequate experts or specialists in the WASH sector.

SUMMARY AND RECOMMENDATION

At the beginning of this work, it set out to provide solutions and answers to pressing questions and issues and to also test different propositions that were raised in the work. Furthermore, data collection and analysis were conducted to offer clarifications on simple questions and hypotheses. This chapter is divided into three parts. These are; the summary of the work, the conclusion, and the recommendation.

6.1 Summary

This research focus is on Implementing SDG 6 in Nigeria: A study of Ado/Odo Ota Local Government Area in Ogun State (2015 – 2019). The central aim is to measure the extent to which Water and Sanitation have been implemented in this Local Government Area from 2015 to 2019. Water is indeed a very vital key for survival and life and for any society to develop, the infrastructure must be in place to ensure healthy and wholesome living. This impacts the quality of life that the people have in society and the nation at large. This research further looks at the water laws and policies in place by the concerned water agencies and institutions, the extent to which they have been implemented, and evaluates the current efforts of the state in meeting Goal 6. Furthermore, it examines the challenges in the WASH Sector in Nigeria and the Right to healthy and clean water as recognized by the United Nations as well as other international bodies.

This research is divided into six chapters. Chapter one looks at on the introductory aspect of the research work and expounds on the following: Background to the Study, Statement of the Problem, Research Questions, Objectives of the Study, Research propositions, Significance of the Study, Scope, and Limitations of the Study and the Outline of the Study. Chapter Two focuses on the Literature Review and Theoretical Framework. It further looks into the Water, Sanitation and Hygiene Sector in Nigeria and goes deeper into the existing Water laws and policies in Nigeria, The importance and relevance of Water on Sustainable Development, and the challenges in the WASH sector in Nigeria, assessment of MDG 7c and SDG 6 and

human right to water. Chapter three covers the Research methodology, Sources of data, Method of Data Collection, Techniques of Data, and Sample Size, history of the water sector in Nigeria, and the evolution of the WASH policy in Nigeria. The research methodology includes interviews, questionnaires, and findings from the internet, magazines, books, and journals. Chapter four gives an outline of the data collated from both the primary (interviews) and secondary sources. Chapter five entails an analysis of the data collated from the field for the study. Chapter six consists of the summary, recommendations, conclusion, and the contribution to knowledge which will be based on the findings from this study. This work shows the essence of safe, healthy, and wholesome water and sanitation to all. It buttresses the fact that it is a very cardinal factor in the development of any nation and contributes hugely to a nation's GDP.

6.2 Conclusion

Not one person can live without clean water. Nobody can succeed if they have to scuffle and work hard to find water. Hence, access to clean, safe, and healthy water and good sanitation and hygiene are human rights and fundamental in promoting decent outcomes in health, nutrition, education, gender, equality, livelihoods, and the socio-economic progress of a country. However, in Nigeria, about 55 million people still do not have access to clean water supply services, 110 million people lack decent toilets, 47 million practice open defecation, and 150 million lack handwashing facilities with soap (WASHNORM, 2018).

A 2019 report from UNICEF indicates that poor water supply and sanitation deprive the Nigerian economy of roughly 1.3% of GDP each year, which is approximately NGN1.9 trillion. These losses are replicated in the loss of productivity as a result of water and sanitation connected ailments, time spent in accessing water and sanitation facilities, unnecessary costs by the Nigerian government and families in fighting against these diseases, and the lost human capacity in malnourishment and death.

This study identified different gaps that became expedient and necessary to address. From the study, there are huge and massive indications that water and sanitation are central for survival for any human on planet earth and it is also important to the socio-economic development and prosperity of any nation. The majority of the studied literature shows that universal access to clean, portable, and affordable water, good sanitation, and Hygiene facilities impacts on Nigeria's outlook. This is very evident in the high number of water-related death recorded particularly during the COVID 19 pandemic that has plagued the nation and the globe at large showing the failures of the institutions, agencies, and the government in meeting the needs of sustainable development Goal 6. Nonetheless, very few and limited literature have been written in this regard thereby making access to information and knowledge almost impossible. Also, there exists a large body of work on different themes such as urban water and sanitation access, open defecation, SDG 6. Although, there is no so much scholarly work that investigates the Implementation of Goal 6 in Nigeria, the effectiveness of the institutions and agencies in the WASH Sector in Nigeria, and most importantly the promotion of SDG 6 and its attendant effect on the socio-economic development of the nation. As such, these are the gap in knowledge this study targets to fill.

For this reason, there is a need for optimal governance and huge governmental backing to push the execution of this goal. Meeting SDG 6 is a very daunting experience and can only be accomplished by making sure that there is the right political structure and management framework at all levels of government; fighting against corruption in all its forms and nature, massive advocacy and sensitization of the people, access to huge funding and resources, capacity building and development of the personnel enhancing access and investment in data availability and utmost integrity; confronting the complications that involve the processes and repairs (which at present damages the sustainability of the facilities); reinforcing the enabling environment for the public and private arrangements, and growing civil society participation to build up responsibility for service delivery and resources. Besides, malleable resolutions should be recognized to confront the complexities in the sector and speed up the required restructuring.

6.3 Recommendations

The provision of healthy and portable water and good sanitation facilities for all is a call for the government of Nigeria to respond to. This is because we live in a society that has a huge disparity between the elites and the poor masses which not only affects the systems generally but the socio-economic growth and development of the Nation. Hence, the recommendation offered in this study is as a result of the outcome, findings and observation stumbled upon in the course of carrying out this research.

- There should be a decentralization and absolute autonomy of the institutions in the WASH sector. This will create room for efficiency and effectiveness.
- A comprehensive and concrete development plan should be drafted for the Water and Sanitation and the Hygiene Sector. This Development plan should be an all-encompassing document.
- Massive infrastructural development in the sector is required. A lot of the infrastructure are fall outs of the post-colonial structures which are either dilapidated, worn out or nonexistent.
- An Investment Plan is also needed if the sector will operate at full capacity. Mechanism should be in place to ensure that siphoning of funds are difficult and nearly impossible.
- The Monitoring and the Evaluation Framework should be developed in other to keep track and measure progress in the sector.

6.6 Limitations of the Study

This study was limited as a result of the COVID 19 pandemic that halted and reduced human interactions. Hence, limiting the researcher from physically interacting with the residents of Ado/Odo Ota Local Government Area in Ogun State. It also limited the access to secondary data.

6.7 Area for Further Study

Water, Sanitation and the Hygiene Sector has witnessed a lot of attention in recent times. The global recognition on its importance and link to other Sustainable Development Goals has triggered the different interventions that has occurred in this regard. However, implementing it in Ado/Odo Ota Local Government Area was examined in this study. There is also need to extend it to the parts of the country and call for government intervention. As such, research should be carried out on the following areas:

1. A Critical Look into Wastewater Management in Nigeria
2. The Socio-economic implications of Water, Sanitation and Hygiene. This study should examine the social, economic and political implications of humanitarian interventions in Nigeria.
3. Water and Urban Sustainability in Nigeria

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PRIMARY SOURCE – INTERVIEW

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