

SUSTAINABLE DEVELOPMENT IN AFRICA: FOCUSING ON AFRICA'S LANDSCAPE, CHALLENGES AND OPPORTUNITIES IN ACHIEVING THE SDG 6 IN FCT, NIGERIA

Wale-Odunaiya Enitan Grace¹, Dikko Mathias Zuma², Azubike Ifeoma Esther³
Department of Economics, Veritas University Abuja
wale-odunaiyac@veritas.edu.ng¹, mdikkozuma@gmail.com², ifyikwumelu@gmail.com³

ABSTRACT

The study examines the Sustainable Development in Africa: focusing on Africa's Landscape, Challenges and Opportunities in achieving the SDG 6 in FCT, Nigeria. Specifically, this study explains the challenges of implementing SDG 6 in Abuja Municipal Area Council (AMAC), FCT. 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 Abuja Municipal Area Council (AMAC), FCT.

Keyword: Water, Sanitation, Hygiene, Sustainability, Development

1.0 INTRODUCTION

1.1. Background to the Study

The access to safe water, sanitation, and good hygiene is one of the most basic necessities of human beings that contributes to their health and wellbeing. According to UNICEF, having access to clean water, basic sanitation, and the practice of good hygiene is vital for survival and growth of children (Khalil, 2023). A recent report from the United Nations (UN) reported that, unless measures are taken in quadruples by 2030, billions of individuals around the world will have no accessibility to clean water and proper sanitation (UNDP, 2018). In addition, the swift urbanization and increase in population, the requirement for water has increased for use in various areas such as industries, agriculture, and energy sectors.

The problem of water stress has been worsened over the years as a result of poor management, misuse, contamination of freshwater supplies, and over extraction of ground water. Moreover, the problem is compounded in developing countries resulting from degraded ecosystems that are influenced by water, low investments in water, and sanitation problems by governments, as well as water shortages brought on by changes in the climate (Khalil, 2023).

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 (Eneh, 2014). According to Uchechukwu (2017), 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 by 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.

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, and so on. Okpara (2014), with regard to the extensive participation of water in development, posits that water and wastewater facilities are "very important human necessities". 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, 2017a). For emphasis, it is reported that, internationally approximately 0.8 billion persons presently want connection to safe water while about 2.5 billion people are short of suitable hygiene facilities with about one billion people engage in open defecation.

The lack of water impedes development by limiting the production of food, health, growth and development of industries. The 2006 report of New Partnership for African Development (NEPAD) indicated 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.

The critical importance of water and sanitation has catalyzed a framework of international policies and collaborative agreements. These global partnerships, such as the joint WHO and UNEP Program Network, provide technical assistance and monitoring across 60 nations, tracking water quality in over 400 urban centers globally (WHO, 2017). Furthermore, according to the 2017 Joint Monitoring Program (JMP) report, the UN introduced the "safely managed" benchmark for domestic water and sanitation. This metric highlights a persistent global disparity: a vast number of individuals, particularly in rural area, still lack basic access. In the Nigerian context, the situation is acute; a significant majority of the population remains underserved, lacking both piped water in their homes and dignified sanitary facilities (Eneh, 2016).

In Nigeria there are numerous offices for water supply and water related policy. 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, 2013).

However, despite the numerous offices responsible for water supply and policies and the global mandate of Sustainable Development Goal 6 (SDG 6) to ensure the availability and sustainable management of water and sanitation for all by 2030, the Federal Capital Territory (FCT) of Nigeria is currently grappling with a severe regression in water security and sanitary standards. The research by Wale-Odunaiya (2025) reported that that the performance of the third tier government, the key drivers of SDGs, is below average and have an insignificant effect on the achievement of clean water and sanitation in FCT by 2030. This gives credence to Dunn's (2017) opinion that the economic wealth of Nigeria depends greatly on her use and the management of the country's water resources. He emphasized that water is key to the economic growth of the country. It greatly impacts employment, creation of jobs, and a country's Gross Domestic Product (GDP) though it is susceptible to environmental changes (Dunn, 2017).

The core of the problem lies in the widening disparity between the FCT's rapid urban landscape expansion and the operational decay of its primary water infrastructure. While the Lower Usuma Dam was designed as a world-class utility, it is currently operating at roughly 50% capacity due to decades of non-desilting and a breakdown in the monthly transfer of raw water from the Gurara Dam. This infrastructural stagnation is further exacerbated by a governance and energy crisis, where unpaid utility bills led to the disconnection of the FCT Water Board from the national grid in early 2026, forcing a reliance on diesel generators that are incapable of powering heavy-duty water turbines.

1.2 Research Questions

This study intends to address the following questions:

- a. How has the implementation of SDG 6 improved the universal access to Safe Water and sanitary services in Abuja Municipal Area Council (AMAC), FCT?
- b. To what extent has Goal 6 been implemented in this Abuja Municipal Area Council (AMAC), FCT?
- c. What are the challenges in implementing universal access to safe and Water and Sanitation in Abuja Municipal Area Council (AMAC), FCT?
- d. What are the solutions in ensuring implementation of the universal access to safe and affordable Water and Sanitation in Abuja Municipal Area Council (AMAC), FCT?

1.3 Objectives of the Study

The research objectives included the following;

- a. To examine how the implementation of SDG 6 has significantly improved the access to safe and affordable Water and Sanitation in Abuja Municipal Area Council (AMAC), FCT.
- b. To investigate the extent to which the universal access to safe and affordable Water and Sanitation has been implemented in Abuja Municipal Area Council (AMAC), FCT.
- c. To assess the challenges in implementing universal Access to safe and affordable Water and Sanitation in Abuja Municipal Area Council (AMAC), FCT.
- d. To proffer solutions to the challenges of the implementation of the Universal Access to safe and affordable Water and Sanitation in Abuja Municipal Area Council (AMAC), FCT.

2.0 LITERATURE REVIEW

2.1 Sustainable Development Goal 6

As a global strategy to ensure a sustainable society for all people, the Sustainable Development Goals (SDGs) were introduced by the UN in 2015 as the 2030 Agenda. The SDGs are a group of seventeen (Neves-Silva, 2022) interrelated goals that deal with several elements of sustainable development, such as eradicating poverty, environmental conservation, and availability of basic amenities including water and sanitation. By 2030, Goal 6 of the SDGs intends to offer everyone with access to sustainable water and sanitation management (Inabo, 2023). SDG 6 seeks to guarantee that everyone in society has equal access to sustainable water and sanitation. Essentially, everyone is entitled to safe water that is adequate in terms of quantity as well as

quality. The SDG 6 strongly emphasizes the need to minimize water waste and maximize water usage from domestic to industrial levels.

Owaho and Ndakara (2023) found that lack of access to water and sanitation is not gender neutral, as it impacts women and children more than men. They were of the view that women and children take a lot of responsibility in collecting water to the house when it is not available. It takes a lot of their time and burdens them, as women can spend hours together walking, queuing, and carrying water to their homes. This time spent could have been invested in other productive areas at home such as childcare and other housework.

Water and sanitation have to be seen as composite human rights, as it continues to grow in scope and influence. Neves-Silva et al. (2022) established that the violation of the rights to water and sanitation also encourages the violation of other human rights, such as right to health and education, thereby giving strengths to the view of right to interrelationship and indivisibility.

The HRWS was established to ensure that access to water and sanitation becomes indispensable in ensuring better life conditions and other human rights (UNDP, 2018). States were to ensure that individual rights to sanitation are ensured without discrimination through safe, physical, accessible, and economic means. Aspects which were of importance to women and girls ensured that sanitary solutions must be hygienic, socially, and culturally acceptable thereby providing dignity and privacy to its users (Khalil, 2023).

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 (Uchechukwu, 2017).

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 (Shiru, 2021).

The GLAAS 2025 report (World Health Organization & UNICEF, 2026) identifies a critical disconnect between national policy and functional execution. While 80% of surveyed countries have integrated climate change resilience into their national WASH policies—a significant

increase from previous years—the "human and financial resource" gap remains the primary barrier to progress. Only 13% of countries report having the necessary budgetary and personnel capacity to fully implement these plans. This suggests that while the legislative framework for Sustainable Development Goal 6 (SDG 6) is maturing, the operational reality is characterized by a 46% funding deficit globally.

2.2 The Impact of Goal 6 on Sustainable Development

Access to safe drinking water, sanitation, and hygiene is very significant for sustainable development. (UNWater, 2014). This was further emphasized in the UNESCO World Water Development Report 2026. The report shifts from technical water management to rights-based governance. It argues that the failure to meet SDG 6 is not merely a resource scarcity issue but a systemic failure to recognize water and sanitation as fundamental human rights. The report highlights that marginalized groups, including displaced populations, ethnic minorities, and those in informal urban settlements, consistently face the highest costs for the lowest quality of water. By framing water as a tool for "equal rights," UNESCO posits that addressing the water gap is the most direct route to reducing global inequality.

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. 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 (Kola-Olusanya, 2024). 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.

Makanda and Kanyerere (2022) 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 (WSMP, 2008). 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 (WSMP, 2008). 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.

2.3 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).
- 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 Mishra & Jain (2023) 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.
- 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. Nwokediegwu (2024), 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.
- 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 (Okafor 2024); 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.
- 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, nonrevenue or unaccounted-for water was extremely high, up to 63% noted for 1998 and 39% for 2013 (Oseke, 2020).

- vi. **The Challenge of Power supply:** Tukur (2018) 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.
- 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, and so on).

3.0 METHODOLOGY

3.1 Research Design

The survey research design examined Sustainable Development in Africa: Focusing on Africa's Landscape, Challenges and Opportunities in achieving the SDG 6 in FCT, Nigeria. The survey research used questionnaire as the instrument of drawing information from respondents. 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 Abuja Municipal Area Council (AMAC), FCT.

3.1.1 Population

The population of this study comprises Public Health experts, Civil Servants, WASH advocates and WASH experts in Abuja Municipal Area Council (AMAC). These categories of people will be selected for this research because of their knowledge and experiences in the promotion of Water, Sanitation, and Hygiene Abuja Municipal Area Council (AMAC), FCT.

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 Abuja Municipal Area Council (AMAC), FCT.

3.1.3 Sample Size

The sample size was purposively drawn from the following areas; FCT Water Board and experts in WASH. The sample size (400) was taken from experts in WASH, FCT Water Board, and Public Health Experts within the locality.

3.1.4 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 Abuja Municipal Area Council (AMAC), FCT.

3.1.5 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.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Discussion

4.1.1 Menstrual Hygiene Management (MHM) & SDG 6

This section presents the data gathered from the respondents on Menstrual Hygiene Management (MHM) & SDG 6 in Abuja Municipal Area Council (AMAC), FCT, Local Government Area

Table 1: Is there a private space (lockable, with water) available at your school/workplace for managing menstruation?

Options	Frequency	Percentage
No	141	36
Yes	251	64

Source: Field Survey, 2026

The frequency table shows that 141 (36%) of the respondents said there was no private space (lockable, with water) available at your school/workplace for managing menstruation while 251 (64%) of the respondents said there was a private space (lockable, with water) available at your school/workplace for managing menstruation.

Table 2: During your period, do you have daily access to enough clean water for washing clothes/bodies?

Options	Frequency	Percentage
No	92	23
Yes	300	77

Source: Field Survey, 2026

The frequency table shows that 92 (23%) of the respondents said they do not have daily access to enough clean water for washing clothes/bodies during their period while 300 (77%) of the respondents said they have daily access to enough clean water for washing clothes/bodies during their period.

Table 3: Where do you primarily manage your menstruation?

Options	Frequency	Percentage
Outdoor area	70	18
Shared Toilet	150	38
Primary Toilet	172	44

Source: Field Survey, 2026

The frequency table shows that 70 (18%) of the respondents said they primarily manage their menstruation in an outdoor area, 150 (38%) of the respondents said they primarily manage their menstruation in a shared toilet while 172 (44%) of the respondents said they primarily manage their menstruation in a private toilet.

4.1.2 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 Abuja Municipal Area Council (AMAC), FCT, 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 Abuja Municipal Area Council (AMAC), FCT. Their responses are presented with a frequency distribution table and calculation.

Table 4: Awareness of clean, portable, and healthy Water, good Sanitation, and Hygiene facilities

Options	Frequency	Percentage
No	141	36
Yes	251	64

Source: Field Survey, 2026

The frequency table shows that 141 (36%) of the respondents were not aware of healthy, clean, and portable Water, good Sanitation, and Hygiene facilities while 251 (64%) of the respondents were aware of Universal access to water and sanitation. Hence, it represents the majority of the respondents that participated in this study.

Table 5: The Water, Sanitation and Hygiene policy is being implemented in Abuja Municipal Area Council (AMAC), FCT

Options	Frequency	Percentage
Strongly Agree	51	13
Agree	146	37.2
Neutral	45	11.5
Disagree	0	0
Strongly Disagree	150	38.3

Source: Field Survey, 2026

13% of the respondents strongly agreed that Water, Sanitation and Hygiene policy is implemented in Abuja Municipal Area Council (AMAC), FCT, 37% of the respondents agreed that Water, Sanitation and Hygiene policy is implemented in Abuja Municipal Area Council (AMAC), FCT, 12% of the respondents indicated neutral that Water, Sanitation and Hygiene

policy is implemented in Abuja Municipal Area Council (AMAC), FCT while 38% of the respondents strongly disagreed that Water, Sanitation and Hygiene policy is implemented in Abuja Municipal Area Council (AMAC), FCT

Table 6: Residents in Abuja Municipal Area Council (AMAC), FCT have connection to safe water, sanitation and hygiene facilities

Options	Frequency	Percentage
Strongly Agree	16	4.1
Agree	131	33.4
Neutral	28	7.1
Disagree	0	0
Strongly Disagree	217	55.4

Source: Field Survey, 2026

4% of the respondents strongly agreed that the residents in Abuja Municipal Area Council (AMAC), FCT have connection to safe water, sanitation and hygiene facilities, 33% of the respondents agreed that the residents in Abuja Municipal Area Council (AMAC), FCT have connection to safe water, sanitation and hygiene facilities, 7% of the respondents indicated neutral that the residents in Abuja Municipal Area Council (AMAC), FCT have connection to safe water, sanitation and hygiene facilities while 55% of the respondents strongly disagreed that the residents in Abuja Municipal Area Council (AMAC), FCT have connection to safe water, sanitation and hygiene facilities

4.1.3 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 Abuja Municipal Area Council (AMAC), FCT. The participants were asked some questions on the Implementation of sustainable development goal 6. Their responses were presented with a frequency distribution table and calculation.

Table 7: SDG (6) has been promoted/domesticated in Abuja Municipal Area Council (AMAC), FCT

Options	Frequency	Percentage
Strongly Agree	35	8.9
Agree	125	31.9
Neutral	53	13.5
Disagree	0	0
Strongly Disagree	179	45.7

Source: Field Survey, 2026

9% of the respondents strongly agreed that SDG (6) has been promoted/domesticated in Abuja Municipal Area Council (AMAC), FCT, 32% of the respondents agreed that SDG (6) has been promoted/domesticated in Abuja Municipal Area Council (AMAC), FCT, 14% of the respondents indicated neutral that SDG (6) has been promoted/domesticated in Abuja Municipal Area Council (AMAC), FCT, FCT while 46% of the respondents strongly disagreed that SDG (6) has been promoted/domesticated in Abuja Municipal Area Council (AMAC), FCT

Table 8: Promoting SDG (6) is important for the socio-economic development of Abuja Municipal Area Council (AMAC), FCT

Options	Frequency	Percentage
Strongly Agree	92	23.5
Agree	223	56.9
Neutral	19	4.8
Disagree	0	0
Strongly Disagree	58	14.8

Source: Field Survey, 2026

24% of the respondents strongly agreed that Promoting SDG (6) is important for the socio-economic development of Abuja Municipal Area Council (AMAC), FCT, 57% of the respondents agreed that Promoting SDG (6) is important for the socio-economic development of Abuja Municipal Area Council (AMAC), FCT, 5% of the respondents indicated neutral that Promoting SDG (6) is important for the socio-economic development of Abuja Municipal Area Council (AMAC), FCT while 15% of the respondents strongly disagreed that Promoting SDG (6) is important for the socio-economic development of Abuja Municipal Area Council (AMAC), FCT.

4.1.9 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 10: 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

Source: Fieldwork 2026

In Table 9, 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.

4.1.4 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 10: 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

Source: Fieldwork 2026

In Table 10, 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.

4.2 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 Abuja Municipal Area Council (AMAC), FCT.

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, 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 diseases, 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.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The Nigerian Federal Government has made a conscious effort with the establishment of the NAP to revitalize the WASH sector of the country. However, the country is still lagging in achieving the objectives of SDG 6.1 and 6.2 as well as that of the NAP. The findings of this study have revealed that notwithstanding the efforts by the government and other development partners, there are still places like the three LGAs used in the study who still have accessibility issues in relation to WASH services. As a result of the high rate of population growth in Nigeria and the increase in rural–urban migration leading to setting up of slums in the urban areas, there is still more expected of the government to provide enough and safe WASH services to the population. The impact of the COVID-19 in addition to political instability in some parts of the country has led to lack of funds by the Federal Government to execute some of these projects to meet the SDG 6.1 and 6.2 targets.

Access to WASH services is greatly important for reviving and assuring socioeconomic development and support for life and a sustainable environment of any nation. Each of the SDG goals has been designed to supplement the work of the other to achieve the ultimate goal worldwide. While the Federal Government has put in efforts to attain these goals, more conscious efforts are needed together with its development partners to be able to achieve the SDGs 6.1 and 6.2 by 2030.

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.

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.

5.2 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.

- a. There should be a decentralization and absolute autonomy of the institutions in the WASH sector. This will create room for efficiency and effectiveness.
- b. 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.
- c. 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 non-existent.
- d. 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.
- e. The Monitoring and the Evaluation Framework should be developed in other to keep track and measure progress in the sector.

REFERENCES

- Awortwi, N. (2015). Introduction: Tracking Progresses and Challenges in the Implementation of the MDGs in Africa. In Awortwi N. & Musahara H. (Eds.), *Implementation of the Millennium Development Goals: Progresses and Challenges in Some African Countries* (pp. 1-10). Addis Ababa, Ethiopia: OSSREA. Retrieved June 30, 2020, from <http://www.jstor.org/stable/j.ctvh8qz53.4>
- Akpabio, E.M., 2012. Water is God's: Commonality view and the challenges of state institutions in Nigeria. *Proceedings of the 13th World Water Congress*, Sept. 1-4, Montpellier, France, pp: 1-16.
- Dunn, A.L. and E. Derrington, (2017). Investment in water and wastewater infrastructure: An environmental justice challenge, a governance solution. *Natl. Resource. Environ.*, 24: 3-12.
- Eneh .O.C., Amuche, N.E, 2014: Potable Water Access and Management in Africa: implications for Poverty, Hunger and Health
- Eneh, O.C. (2016). "Effects of Water and Sanitation Crisis on Infants and Under-five Children in Africa," *Journal of Environmental Science and Technology*, 4(2): 103-111
- Inabo OA, Arshed N. (2023). Impact of health, water and sanitation as key drivers of economic progress in Nigeria. *African J Sci Technol Innov Dev*. 2023;11(2):235–42.
- Khalil H. (2023). A quarter of humanity faces extreme water stress – and it's poised to get worse, new report finds [Internet]. CNN; 2023 [cited 2023 Oct 29]. Available from: <https://edition.cnn.com/2023/08/16/world/water-stress-scarcity-climate-crisis-scen-intl/index.html>
- Kola-Olusanya, A., Oyeyemi, E., Adewale, P. S., and Omobuwa, O. (2024). Role of environmental education in water pollution prevention and conservation in Nigeria. *Water Supply*, 24(2), 361-370.
- Makanda, K., Nzama, S., and Kanyerere, T. (2022). Assessing the Role of Water Resources Protection Practice for Sustainable Water Resources Management: A Review. *Water*, 14(19), 3153.
- Mishra, V., Avtar, R., Prathiba, A., Mishra, P. K., Tiwari, A., Sharma, S. K., Singh, C. H., Chandra Yadav, B., and Jain, K. (2023). Uncrewed aerial systems in water resource management and monitoring: a review of sensors, applications, software, and issues. *Advances in Civil Engineering*, 2023(1), 3544724.
- Neves-Silva P, Martins GI, Heller L. (2022). Human rights' interdependence and indivisibility: a glance over the human rights to water and sanitation. *BMC Int Health Hum Rights*.

- Nwokediegwu, Z. Q. S., Adefemi, A., Ayorinde, O. B., Ilojianya, V. I., and Etukudoh, E. A. (2024). Review of water policy and management: Comparing the USA and Africa. *Engineering Science & Technology Journal*, 5(2), 402-411.
- Okafor, C. O., Ude, U. I., Okoh, F. N., and Eromonsele, B. O. (2024). Safe Drinking Water: The Need and Challenges in Developing Countries. In *Water Quality-New Perspectives*. IntechOpen.
- Okpara, C.G., N.F. Oparaku and C.N. Ibeto, (2014). An overview of water disinfection in developing countries and potentials of renewable energy. *J. Environ. Sci. Technol.*, 4: 18-30.
- Oseke, F., Aronru, G., Adjei, K., and Eduvie, O. (2020). A review of stakeholder's participation importance in the development of water diversion systems in developing countries: a case from Gurara water diversion system, Nigeria. *Nigerian Journal of Technology*, 39(4), 1263-1275.
- Owho O, Ndakara OE. (2023). Progress on sustainable development goal for sanitation and hygiene in sub-Saharan Africa. *J Appl Sci Environ Manag.* 2023;26(6):1143–50. doi: 10.4314/jasem.v26i6.22
- Oyebande, L., (2013). Policy horizon for sustainable urban water management in Nigeria. Proceedings of the Yokohama Symposium on Hydrology of Warm Humid Regions, July 93, Yokohama, Japan, pp: 423-429
- Shiru, M. S., Shahid, S., and Park, I. (2021). Projection of water availability and sustainability in Nigeria due to climate change. *Sustainability*, 13(11), 6284.
- Uchechukwu Enyidi (2017). Potable Water and National Water Policy in Nigeria (A historical synthesis, pitfalls and the way forward). *Journal of Agricultural Economics and Rural Development*, 3(2): 105-111.
- UNESCO World Water Assessment Programme. (2026). *The United Nations world water development report 2026: Water for all people: Equal rights and opportunities*. UNESCO. <https://www.unesco.org/en/articles/united-nations-world-water-development-report-2026-water-all-people-equal-rights-and-opportunities>
- UNDP (2018). Human development report. New York: United Nations Development Program; 2018.
- Wale-Odunaiya, E. G. (2025). *Fiscal federalism and third tier government in nigeria's federal capital territory: assessing the achievement of selected sustainable development goals*. [Doctoral Dissertation, Veritas University, Abuja. Nigeria]
- World Health Organisation (WHO). Domestic Water Supply in Water, Sanitation and Health Electronic Library. 4th ed. Microsoft Internet Explorer. 2017a.

World Health Organization & United Nations Children's Fund. (2025). *Progress on household drinking water, sanitation and hygiene 2000–2024: Special focus on inequalities*. World Health Organization. <https://washdata.org/reports/jmp-2025-wash-household>

World Health Organization & United Nations Children's Fund. (2026). *State of systems for drinking-water, sanitation and hygiene: Global update 2025*. World Health Organization.