

**INFLUENCE OF PUBLIC LIBRARIES ON THE IMPLEMENTATION OF
SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA**

BY

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ABSTRACT

The study investigated the influence of public libraries on the implementation of Sustainable Development Goals (SDGs) in Nigeria. Seven research objectives and questions guided the study. Three null hypotheses were tested at 0.05 level of significance. The research design adopted for the study is a mixed research method (qualitative and quantitative methods). The population of the study comprised 1,776 public library staff in the 36 states in Nigeria including the Federal Capital Territory out of which 169 were sampled using purposive sampling procedure. The population of users was unknown and the Smith's formula for selecting a sample from an unknown population was used to sample 385 public users; which was distributed among the 6 states using stratified disproportionate sampling procedure. Purposive sampling (typical case sampling) was used to select three (3) SDGS programme officers from Niger, Lagos and Adamawa States, that were interviewed for the study. Data were collected through: questionnaire, interview, observation checklist and a sensitisation workshop. A total of 169 librarians' questionnaire were distributed out of which 110 copies were retrieved. Three hundred and eighty-five (385) users' questionnaire were distributed out of which 274 copies were retrieved and used for the study. Data collected were analysed using descriptive and inferential statistics. Results indicated that awareness of public librarians on Sustainable Development Goals is high with mean value of 2.80 and a low involvement in the activities of Sustainable Development Goals with an average mean value of 2.35; Qualifications of library staff ranked high with an average mean score of 2.89; Attendance at conferences and seminars ranked low with mean value of 2.31; Presence on social media of public librarians ranked low with an average mean value of 2.40; Influence of public libraries on the development of users was high with an average mean value of 3.34. A sensitisation workshop was held that depicted how the public library can help in the implementation process of Sustainable Development Goals and it was a success because 82% of the attendees stated that the workshop was useful to them while, 72% stated that they would attend more workshops organised in the public library. It was gathered that no Sustainable Development Goals programme has taken place in any Nigerian public library before. Among the challenges confronting public libraries in Nigeria, poor power supply and inadequate material resources ranked high with an average mean score of 3.04. Inadequate human resources, poor infrastructure, inadequate knowledge of Sustainable Development Goals, poor attendance at conferences and lack of Internet connectivity equally ranked high with an average mean value of 2.80. Findings revealed that, public libraries in Nigeria have not been involved by the government in the implementation processes of Sustainable Development Goals. The public libraries are in a bad state infrastructurally, and for them to be viable to fulfill their mandate, they would have to be refurbished. Getting them involved in Sustainable Development Goals activities would not only be about using them to actualise Sustainable Development Goals implementation, but will help bring back life and activities to the public libraries. The study, therefore, recommended that the government, through the Sustainable Development Goals offices create a hub of activities in the public libraries by using them as tools in their implementation processes.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

The goal of development is to bring about social change that enables people to fulfill their potentials in all aspects of life, through enhancing the economic and social climate of a nation. Growth, progress, constructive change, or the addition of physical, economic, environmental, social, and demographic components are all products of this process. Raising the population's standard of living and quality of life is the goal of development. Development, according to Barder (2015) is a dynamic process rather than an outcome. This indicates that shift from one state or condition to another is involved. Development is a political process, according to Meidan (2018) since it calls into question on who has the authority to do what and to whom. Development is apparent, involving a change in the quality of something as well as the setting up of circumstances that will allow that change to continue. In general, it refers to changes on how natural and human resources are managed in a region in order to generate income and enhance people's quality of life.

On the other hand, underdevelopment is the condition of an economy, in which the standard of living for the majority of the population is exceedingly poor due to extremely low levels of per capita income brought about by low levels of productivity and rapid population increase. According to Gupta (2017), the label "developing countries" is applied to underdeveloped countries, indicating that these countries are capable of and are in fact making considerable attempts to address their issues with poverty and low income. A country is considered underdeveloped, by the United Nations (2018), if its real per capita income is lower than that of the USA, Canada, Australia, and Western Europe. The emphasis is on the low-income level in comparison

to more developed nations and the lack of any discernible progress in significantly raising the standard of living of the populace. This is the predicament in which Nigeria finds itself; according to Rodney cited in Mandalu *et al.* (2018), this is largely due to the type of education offered to Nigerians by the colonial masters, which essentially consisted of learning to read and write so that interpreters could be used. Early science education was not provided to Nigerians; as a result, innovations were hindered, which led to poverty and a low level of living. Rodney went on to say that other developing nations throughout the world are also impacted by this, not only Nigeria.

In the light of the aforementioned claims, there are calls for the eradication of poverty, the reduction of inequality, and the management of climate change. At the United Nations conference in New York on September 25, 2015, world leaders endorsed the 2030 Agenda for Sustainable Development to put these demands into practice. According to the International Federation of Library Association (IFLA), the 2030 Agenda includes 17 new Sustainable Development Goals (SDGs), which will direct financing and policy for the next 15 years, starting with a historic commitment to abolish poverty worldwide forever.

The Sustainable Development Goals are an international call to action to eradicate poverty, safeguard the environment, and guarantee that everyone lives in peace and prosperity. The 169 targets that make up the United Nations 2030 Agenda for Sustainable Development are divided into 17 goals that address social, environmental, and economic advancements. Plans were also laid out for all nations to actively participate in improving the lives of people around the world. The Millennium Development Goals (MDGs), which united the globe in September 2000 around a shared 15-year agenda to combat poverty, were replaced with the Global Goals (UN, 2015).

The United Nations emphasised that, the seventeen sustainable development goals (SDGs) are based on the Millennium Development Goals (MDGs) and stressed for international cooperation in order to achieve global economic growth, environmental sustainability, and social inclusion for all. The seventeen SDGs goals of the Lyon Declaration (2015) include the following, with targets aimed at all spheres of development: Goal 1: end poverty in all its forms everywhere; Goal 2: end hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 3: ensure healthy lives and promote well-being for all at all ages; Goal 4: ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 5: achieve gender equality and empower all women and girls; Goal 6: ensure availability and sustainable management of water and sanitation for all; Goal 7: ensure access to affordable, reliable, sustainable and modern energy for all; Goal 8: promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; Goal 9: build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation; Goal 10: reduce inequality within and among countries; Goal 11: make cities and human settlements inclusive, safe, resilient and sustainable; Goal 12: ensure sustainable consumption and production patterns; Goal 13: take urgent action to combat climate change and its impacts; Goal 14: conserve and sustainably use the oceans, seas and marine resources for sustainable development; Goal 15: protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt bio diversity loss; Goal 16: promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; and, Goal 17: strengthen the means of implementation and revitalise the global partnership for sustainable development.

According to UN (2016) the basic goal of sustainable development is to meet the requirements of the present without jeopardising the capacity of future generations to meet their own needs. Finding the ideal balance between the demands and well-being of people today and those of people in the future, including current and future generations, is key to sustainable development. The above goals can best be achieved if the society is aware of the existence of these goals and how to harness them to improve different areas of their lives and environment.

This study focused on:

Goal 1: End poverty in all its forms everywhere;

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture;

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; and

Goal 6: Ensure availability and sustainable management of water and sanitation for all;

This is because out of the 17 goals, SDG 4 deals directly with education, which is one of the core objectives of the public library while goals 1, 2, and 6 deal directly with the first pressing needs of human beings which is food.

Other goals and related targets are more qualitative in nature and primarily refer to the direction of change. Some goals and related targets are expressed in precise numerical forms and reference existing indicators. Demographic characteristics are one of the elements that can help with the accomplishment of these objectives. Demographic variables are individual statistics that include data on things like family size, ethnicity,

geography, income level, gender, and educational attainment. According to the UN (2016), demography affects how many of these goals are accomplished and how they are accomplished. In order to inform development policy that supports the implementation of the sustainable development objectives and to track progress toward their fulfilment, reliable data on population number, growth, distribution, and characteristics are essential. Lutz and Butz (2015) states that, although the SDGs do not specifically address population trends, many of them are either directly or indirectly tied to them. The authors also pointed out that the implementation of the SDGs depends on demographic factors like age, sex, education, and population heterogeneity.

The public library serves as one of the best tools for achieving sustainable development goals since it is the repository of society's knowledge and has clientele that spans all walks of life, comes from all origins, both genders, of various ages, and has a variety of information demands. Increased access to information and knowledge supported by universal literacy is a crucial component of sustainable development (International Federation of Library Associations and Institutions (IFLA) 2017). Accordingly, the organisation described a public library as a facility created, backed, and funded by the community, whether through local, regional, or federal government, or through another type of community organisation. According to IFLA (2017), public libraries serve as the people's universities and are incorporated into development plans aimed at enhancing peoples' quality of life. For instance, public libraries serve as platforms in underdeveloped nations to advance the SDGs in their localities and because of this, people experience their impacts very strongly. The United Nation's 2017 report on the SDGs and libraries said that Bostwana public libraries had made progress toward SDG 3, which calls for enhancing the health of its population. Eighty-seven percent (87%) of Bostwana library users claimed that the health information they obtained from the

services of the public library had benefited their health. Also, the Ljubljana Employment Information Service (EIS) was established in Slovenia to help match the unemployed with suitable employers.

To address the requirements of both people and groups, the public library's main goal is to offer materials and services in a variety of formats. Public libraries are facilities for learning, entertainment, information, culture, and research. Due to the non-formal education it offers, it is known as the layman's university. By providing the individual with access to a vast and varied range of knowledge, ideas, and opinions, they play a crucial part in the growth and maintenance of a democratic society. According to Adeleke (2017), the public library offers equitable access to knowledge, information, lifelong learning, and creative works to all members of the community, regardless of race, nationality, age, gender, religion, language, handicap, economic and employment position, or level of education. Since everything needed for the full development of human existence may be found there, the public library has gained recognition as a resource center. If correctly used, a reputable public library will elevate a society to new heights.

Access to information is essential for the promotion of sustainable development. Information professionals use information for research and discovery, farmers use information to connect to new markets, entrepreneurs use information to access capital to launch a business, girls and women use information to learn job-related skills, and healthcare professionals use information to conduct current patient care research. In light of this, once there is free access to information through the public library, the varied needs of every individual may be met and taken care of. Due to this need, the public library requires both people and material resources in order to do its work more quickly, easily, and with a noticeable social impact.

The world has transformed into a global village where knowledge is easily accessible with only a few clicks of the button as the demand for information in diverse human endeavours has increased. The World Bank (2016) defined Information and Communications Technology (ICT) as an all-encompassing term that includes any communication device or application, including: radio, television, cell phones, computer and network hardware and software, satellite systems, as well as the various services and applications associated with them, like video conferencing and distance learning. ICT can be used in libraries for library automation, a process that minimises human participation in all library services so that any user can acquire the desired information with the greatest comfort and at the lowest cost. It is impossible to overstate the relevance of ICT in libraries since it improves access to a portion or the entire collection, including simple texts, photos, graphics, audio and video resources, and other library objects that have been transformed to electronic format. According to Mamman (2015), a key feature of ICTs is that they enable electronic communication, information gathering, computation, and control at a distance. This enables richer, faster, and more flexible communications and decision-making.

Additionally, the World Economic Forum (2015) noted the significance of ICT in contemporary society, stating that it is increasingly difficult to succeed in any aspect of human existence without integrating ICT. Although ICT does not always make its customers' lives better, there is mounting proof that its use can quicken and enhance their quality of life. Modern society is changing, and as a result, information technology is taking centre stage. This has greatly increased knowledge, which has led to new ways of providing library services. Information and communication technologies (ICTs) are essential for constructing a future that is more sustainable. Evans (2016) stated that libraries all over the world now have very high expectations due to the significant

changes in the global information landscape, where ICT is seen as the driving force. ICT is frequently discussed in relation to a certain setting, such as ICT in libraries, hospitals, and schools. Therefore, given the significance of ICT in the extraction and dissemination of information, it is crucial to completely implement its integration into the libraries, especially the public libraries, in order to better the society.

The collection, Information and Communication Technologies and other resources of public libraries are essential to effectively carry out its main duties as the people's university and development agent. Public libraries in Nigeria have not yet reached their full potential, in contrast to some of their peers around the world. Public libraries are powerful tools for actively connecting with people and meeting needs all across the world, but in Nigeria, their potential is still untapped. Previous research on the SDGs and public libraries in Nigeria has found that, although librarians are knowledgeable about SDGs, they are not active participants in the initiatives that support its implementation. The majority of public libraries lack operational ICT equipment and ICT-trained workers. Those who have access to ICT resources do not effectively use them to advance the SDGs. Considering the objectives of Public Libraries, which are to educate, research, inform, culturise and recreate, the researcher, embarked on the study to determine how the public libraries can be used for the implementation of sustainable development goals in Nigeria.

1.2 Statement of the Research Problem

Countries all over the globe desire and anticipate an uninterrupted, durable, lasting and all round development. This development could be in the educational, economic, socio-political, scientific and technological spheres. Countries around the world are actively involved in the implementation processes of SDGs using the public libraries as effective

tools. This is because public libraries have the ability to reach out to a wide range of people with life-changing programmes. For the public library to carry out these responsibilities effectively, it has to be equipped, at least, with basic materials and human resources which include, book and non-book materials, information and communication technologies, trained library staff, among others. IFLA (2017) posited that the public library is the best dissemination tool for this purpose, largely because it is regarded as the people's university and it is open to a wide range of clientele which comprises of literate and illiterate audience.

However, the above condition is not obtainable in Nigerian public libraries. From personal experience, the researcher deduced that the potential of public libraries in Nigeria in the area of helping to bring about development has not been fully maximised. The public library has been paid little attention by developmental agencies in the country towards the achievement of SDGS. This could be because public libraries in Nigeria are not only lacking in materials and adequate manpower but are also in a poor infrastructural state. Literature on public libraries in Nigeria showed that over the years, there has been a lot of outcry regarding the dilapidating state of Nigeria's public library, yet, the government, both at the state and federal levels seem not to understand the important roles the public library can play in nation building. Ejechi (2018) pointed out that the government is yet to see the library as a tool for development and for solving many challenges we may have as a nation. As such, the nonchalant attitude of the government towards the building of the public library as a whole and the non-involvement of the public library in developmental activities has become the order of the day. Furthermore, literature has shown that majority of Nigerian public librarians do not have knowledge of the sustainable development goals and therefore, may not have been actively involved in its implementation. This study therefore seeks to determine

the influence of public libraries on the implementation of sustainable development goals in Nigeria.

1.3 Aim and Objectives of the Study

The general aim of this study was to find out the influence of public libraries on the implementation of sustainable development goals in Nigeria. Specifically, the study was designed to:

1. determine the level of awareness of sustainable development goals in public libraries in Nigeria;
2. ascertain the quality of the available human resources such as qualification of library staff, attendance of developmental programmes and social media usage in the public libraries that can enhance the achievement of sustainable development goals;
3. ascertain the influence of public libraries on the overall development of its users;
4. ascertain the available material resources in the public libraries that can enhance the implementation of sustainable development goals;
5. identify possible ways through which public libraries' resources are being utilised to enhance the implementation of SDGS;
6. determine how the sustainable development implementers use public libraries resources to enhance sustainable development goals;
7. determine the hindrances that curtail the use of public libraries resources in the implementation of SDGs;
8. establish if there is any significant relationship between the quality of the available material resources in the public libraries and successful implementation of sustainable development goals in Nigeria;

9. find out if there is any significant relationship between the librarians' level of awareness and the implementation of sustainable development goals; and
10. ascertain if there is any significant relationship between the quality of human resources in public libraries and the implementation of sustainable development goals.

1.4 Research Questions

The following research questions guided the study:

1. What is the level of awareness of sustainable development goals in public libraries in Nigeria?
2. What is the quality of the available human resources in terms of qualification of library staff, attendance of developmental programmes and social media usage in the public libraries that can enhance the achievement of sustainable development goals?
3. What is the influence of public libraries on the overall development of its users?
4. What are the available material resources in the public libraries that can enhance the implementation of sustainable development goals?
5. What are the possible ways through which public libraries' resources are being utilised to enhance the implementation of SDGS in Nigeria?
6. How do the sustainable development goals implementers use public libraries' resources to enhance sustainable development goals?
7. What are the hindrances that curtail the use of public libraries resources in the implementation of SDGS?

1.5 Null Hypotheses

The following null hypotheses were formulated for the study and tested at 0.05 level of significance:

H₀₁ - There is no significant relationship between the availability of material resources in the public libraries and successful implementation of sustainable development goals in Nigeria.

H₀₂ - There is no significant relationship between the librarians' level of awareness and the implementation of sustainable development goals

H₀₃ - There is no significant relationship between the quality of human resources in public libraries and the implementation of sustainable development goals.

1.6 Justification of the Study

This research would be of great benefit to the public libraries, the government and the communities where such libraries are situated.

Government: It would assist the government in their implementation process of sustainable development goals. It would also help the government in the planning and budgeting for public libraries in order to equip them with necessary tools for educating the populace on the benefits of SDGs.

Public library staff: It would equip public library staff to learn how to carry out their duties of informing and educating the populace on general issues more effectively, by training interested library staff on how to use the available ICT tools in their libraries to implement SDGs. It would provide and increase the knowledge base of the staff on the existence on SDGs by creating library campaigns and sensitisation programmes on each of the goals towards positively affecting the lives of the people. This would also help to

boost people's attention to the library through participation in developmental programmes.

General Public: This category cuts across people from all walks of life. The study would help develop new ways of using the public library and ICT to impact on the society through introduction of life-changing ways to produce more and healthier food in agriculture, information on youth empowerment programmes, information on health issues and so many other activities like library campaigns that would draw peoples' attention to the public library. The information generated from this research can be used to identify gaps that need further researching.

The normalization process theory used in this study is important to the study because it describes the process and steps for introducing a new idea to an existing structure, from the introductory phase to the acceptance phase.

1.7 Operational Definition of Terms

The following terms are defined in the context of this study to enhance their understanding and reflect their meaning in the body of the work:

Implementation of Sustainable Development Goals: A process of putting a decision or plan for example sustainable development goals into effect or execution.

Public libraries: These are libraries that are accessible by the general public and is funded from public sources, such as taxes; the people's university.

Sustainable development goals: This is a blueprint to achieve a better and more sustainable future for all citizens of Nigeria.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptual Model

The roles of public libraries are: to educate the populace by making available information resources; create an enabling environment for recreation where users can relax in a serene environment; adequately inform their users on latest trends in their endeavours; preserve the peoples culture while exposing them to other cultures and facilitate research activities that can help solve problems in the society. To efficiently carry out these roles, the public library has to be equipped with both material and human resources. The material resources which cover the area of availability, relevancy, currency, reliability, ease of use, variety, universality, human resource is viewed as active instruments or tools used to achieve SDGs through, government policies, effective sensitisation, library campaigns, time and adequate knowledge.

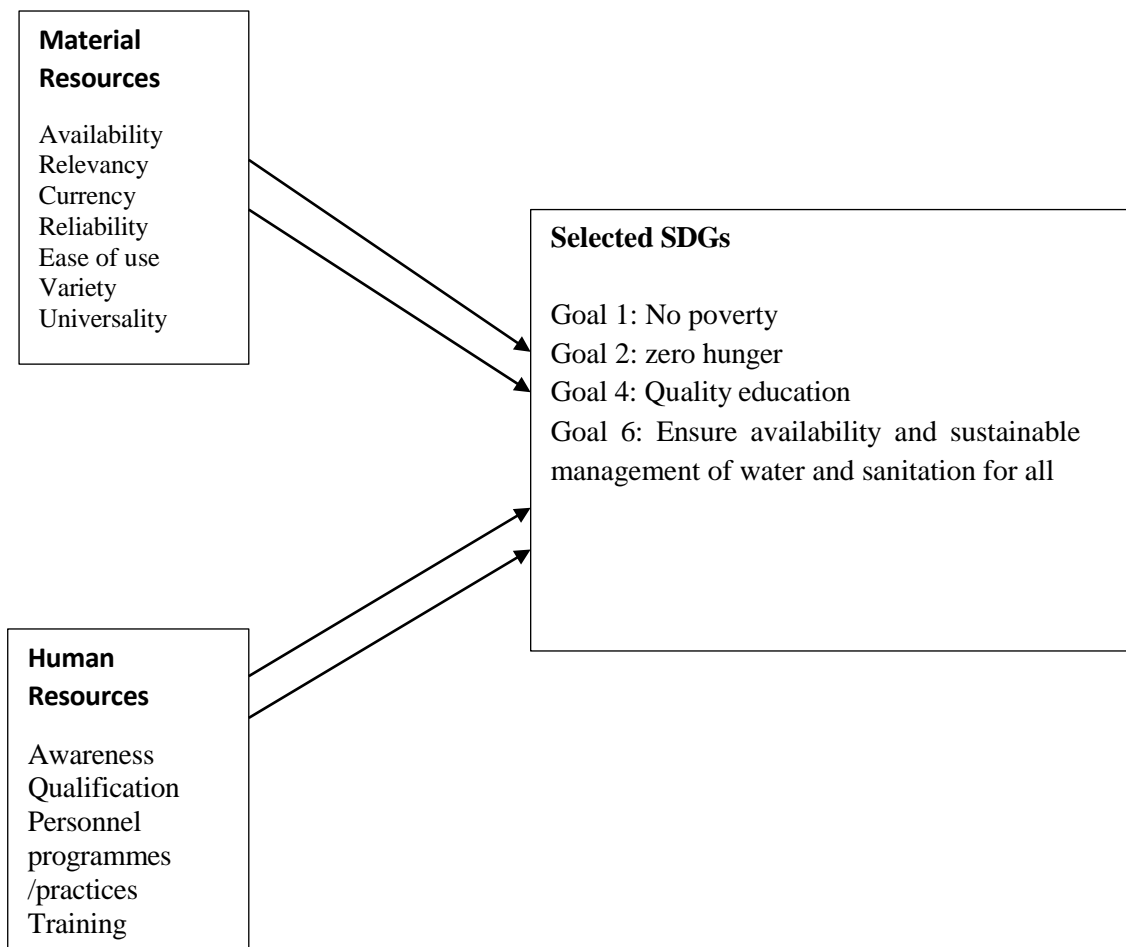


Figure 2.1 Conceptual Model

Author's original construct (2021)

Figure 2.1 represents the interconnection between the public library and the selected sustainable development goals. The level of the public library involvement in the SDGs implementation relies mainly on what the public library has to work with. The public library must have capable hands (human resources) that can effectively communicate to the people in the society about their services and vital issues that affect them. They must also have enough material resources that can be used in carrying out their mandate. To help the general population become aware of the need to safeguard themselves, their environment, and the risks associated with neglect. Okoye *et al.* (2019) noted that the public library is expected to develop programmes and strategies that would work with

various information media and organizations. Through library campaigns, the library can have a significant impact on how sustainable development is implemented. Ubale and Yahaya (2016) defined the term "library campaign" as a set of initiatives taken by librarians to enhance clientele satisfaction and service delivery. Its goal is to advance the public's lifelong education by promoting, assisting, and enhancing the use of libraries through the activities of librarians and user groups.

The development of a strong set of conceptual tools that allow researchers and practitioners to recognise, categorise, and explain crucial components of implementation processes and outcomes is the goal of implementation theory. A group of constructs taken from previous theories are connected by the suggested general theory provided here. When combined, these start to fully characterise and explain many aspects of the processes involved in implementation, embedding, and integration. Social systems are emergent, which means that both endogenous and external forces affect them through time and across place. These influence social systems. The degree to which a theory genuinely clarifies and explains a group of phenomena determines whether or not it is valid. Capability, capacity, potential, and contribution are the four constructs that are brought together to form the general theory.

2.2 Conceptual Framework

2.2.1 The Concept of Sustainable Development

Sustainable development is a strategy for structuring society to ensure its long-term viability. According to United Nations (2015), a country is deemed to be developed when it is able to provide a high standard of living for its populace. Development is crucial and essential to the sustenance and growth of any nation. The population of the globe is primarily concentrated in developing countries. According to Barder (2015),

the development community has realised that without assuring sustainability, all efforts at development will be ineffective and might even do more harm than good. Boongaarts (2016) suggested that resource consumption increases as a result of economic growth, which has negative effects on the environment, like climate change.

According to UN (2015), at the start of the new millennium, a summit of world leaders met at the UN in New York in September 2000 to adopt a set of Millennium Development Goals (MDGs) that were intended to reduce poverty and narrow the gap between the rich and the poor, which is a threat to the future of humanity and the planet. The MDGs established eight objectives for raising the standard of living for individuals in the least developed countries in fifteen years. These goals are:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

Source: United Nations (2015).

The United Nations (UN) assessed the degree to which certain MDGs had been achieved in 2015. The UN reported that, compared to 2000, more than one billion people had been lifted out of abject poverty, strides had been made against hunger, a

considerable number of girls had enrolled in school, new and creative partnerships had been forged, and decision-making in both developed and developing nations had changed. UN (2015) pointed out that despite these significant achievements, none of the MDGs have been entirely attained. Progress has not been consistent and inequality has persisted. For instance, the bulk of the world's one billion severely poor people reside in just five nations, women continue to experience the negative effects of inadequate health and sanitation facilities, and there are still big differences between rural and urban communities. Renewed political will is needed to advance, and all stakeholders must work together to define and pursue the proper development goals over the long term.

World leaders, including heads of states and representatives of from civil societies, gathered in Rio de Janeiro in 2012 to reaffirm their commitment to advancing a planetary future that is economically, socially, and environmentally sustainable for both the current and coming generations. In accordance with IFLA (2016), sustainable development is a global commitment to improve the world for all of its residents by establishing targets connected to the 17 goals. The 2030 Agenda for Sustainable Development (the 2030 Agenda) was formally adopted by the 193 UN member states on September 25, 2015, in New York. The new agenda offers a road map for efforts towards international development through 2030 and beyond. Although it is not legally enforceable, the 2030 Agenda has a significant impact on development cooperation and financial flows from a variety of sources, including nation states, multilateral organizations, the private sector, and charitable organisations.

The Millennium Development Goals (MDGs) are replaced by the 2030 Agenda, which is a more comprehensive, forward-thinking, and innovative agenda that addresses the myriad difficulties the world faces today and in the future. It has 169 targets divided

into 17 Sustainable Development Goals (SDGs). The SDGs add to the MDGs and set significant new objectives for ocean conservation, infrastructure development, peace, and good government. These goals are:

- End poverty in all its forms everywhere
- End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Ensure healthy lives and promote well-being for all at all ages
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Achieve gender equality and empower all women and girls
- Ensure availability and sustainable management of water and sanitation for all
- Ensure access to affordable, reliable, sustainable and modern energy for all
- Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
- Reduce inequality within and among countries
- Make cities and human settlements inclusive, safe, resilient and sustainable
- Ensure sustainable consumption and production patterns
- Take urgent action to combat climate change and its impacts
- Conserve and sustainably use the oceans, seas and marine resources for sustainable development

- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Strengthen the means of implementation and revitalize Global Partnership for Sustainable Development

In order to accomplish these goals, according to Unwin (2017), those who create policies and carry out programmes must address issues of empowerment, concentrate on the needs of the most vulnerable, create cutting-edge technological solutions and new business models, legislate new types of regulation that allow governments to support the ICT and telecommunications sector, and make sure that the systems being created have effective security and resilience. Multi-stakeholder collaborations can be a successful method for putting into action ICT projects that will help achieve the SDGs.

The sustainability in its various manifestations is the unifying theme of the 17 SDGs. The sustainability of resources, especially the condition of the planet, must be taken into account in the development goals in the first place (environmental sustainability). In addition to preserving the environment, it is crucial to think about how to make sure that the development goals are both compatible with sensible public policies that support social and political sustainability and economic viability (economic sustainability). Though, the SDGs are interconnected and achieving sustainability in each of the three dimensions mentioned above - environmental, economic, and social/political sustainability - is vital for all of them, certain SDGs place a stronger emphasis on one component than others. SDGs 4, 8, and 9 are more concerned with ensuring economic

sustainability by promoting goals designed to expand productive economic opportunities for all people, SDGs 1, 3, 5, 11, 16, and 17 focus on issues affecting the society as a whole. For instance, SDGs 13 to 15 emphasize the importance of environmental sustainability and the need to take action to address climate change, promote biodiversity, and protect our forests and oceans.

According to Ejechi (2018), sustainable development is crucial to a nation's growth and development in order to successfully raise the meaningful level of life for its citizens. The needs of both the present and the future generations are met by sustainable development. In other words, it is the development that ensures a higher standard of living for everyone, both now and in the future. Benson *et al.* (2018) states that, while development may be required to satisfy human needs and enhance quality of life, it must take place without impairing the ability of the natural environment to satisfy both current and future requirements. The idea that sustainability advances both the interests of present and future generations as well as the ability of the earth to regenerate, has given rise to the sustainable development movement. Sustainable development, is defined by the World Bank in 2016 as advancement in the social, political, religious, and economic structures of the country. It refers to the overall transformations and development of the society and its inhabitants. In addition, IFLA (2017) stated that sustainable development is the concept of environmental, economic, and social growth and equality, all within the context of the boundaries of the natural resources of the globe.

2.2.2 Public Libraries

The primary purpose of the public library, according to Mamman (2015), is to give the local population access to free information. The majority of public libraries were established and are now maintained because there is a need for an institution that is

open to everyone and that provides access to knowledge in printed and other formats, such as multimedia and internet sources, to promote formal and informal education. People need education throughout their lives, whether it is in more formal settings like schools, colleges, and universities, or in less formal settings like their jobs and daily activities. Because of this, Stiglitz (2015) highlighted that learning is, for the majority of people, a lifetime process that does not finish with the conclusion of formal education. At different points of their lives, people will need to learn new skills in a society that is becoming more complicated. The function of the public library in supporting this process is crucial.

According to Obasi (2015) in a different study, patrons of public libraries in any city come from all walks of life, including the youngest children and the oldest adults, the wealthiest residents and the most economically disadvantaged, as well as the most highly educated and the illiterate. In other words, unlike other types of libraries, whose services are restricted to a specific group of users, the public library embraces all types of customers and has no limit to the clientele it can serve. As a result, IFLA (2016) confirmed that the public library performs specific functions to carry out its mandate, including the following: to support the civic and cultural activities of groups and organizations in a positive way; to make recreation and leisure time wholesome and positive; and to provide the user with access to information about a wide range of human activities, such as agriculture, crafts, The public library's services are available to everyone, and they play a crucial part in gathering, arranging, and using information. They also give people access to a variety of information sources. Additionally, according to IFLA (2016), the public library has a special duty to gather local data and make it available without delay. By gathering, preserving, and facilitating access to materials pertaining to the history of the community and of specific people, it also

serves as a memory bank for the past. By offering a variety of information, the public library helps the society to make decisions regarding important matters.

Similarly, *Public Libraries 2020* (2015) stated that for a library to be successful, it should be based on the culture of the nation or region in which it is located. As a result, it is unlikely to be successful if it follows a structure that is at odds with the culture of its citizens. For the interest of the society, public libraries offer locally centered services and ought to offer community information services. Through user surveys, open forums, peer groups, and other information gathering techniques, they determine the services that the community needs. According to Schrag *et al.* (2015), the services and resources offered by public libraries should be focused on immediate requirements, which needs to be updated frequently. Without this strategy, the public library would not be able to provide acceptable service nor used to its fullest extent as a result, missing its intended objectives. Therefore, it is crucial for librarians to be aware of community changes brought by factors including social and economic development, demographic change, differences in age structure, levels of education, job patterns, and the establishment of new educational and cultural institutions. According to Obasi (2015), a public library should be seen as embodying the right to access and utilize information in its entirety for the purpose of learning. The ability to access and comprehend information is a fundamental human right, and there is currently more information available than at any other time in history.

The public library plays a crucial role in gathering, organizing, and utilizing information, as well as in offering access to a wide variety of information sources. The public library has a special obligation to compile and make accessible local information. It serves as a remembrance of the past by gathering, preserving, and making material related to the history of the neighbourhood and of individuals accessible. According to

Lawson (2016), the public library helps the society to engage in informed discussion and make critical decisions by offering a wide variety of knowledge. The public library should, if possible, work with other organizations to collect and provide information in order to maximize its effectiveness. Therefore, the public library needs to be well-equipped to meet the informational needs of the diverse people and organizations in a given town. It is a library that is accessible to everyone by nature. Public libraries were designed to give residents of a community a place to go for leisurely reading, which is why a focus on fiction is placed there, according to Chewe and Imasiku (2018). People could use the information resources for self-education as well as for amusement.

According to Global Libraries Atlas (2015), public libraries also have the benefit of informing the general public about societal events through the use of newspapers, magazines, pamphlets, and the like. As a result, public libraries, like other associated social institutions like theatres, clubs, sports venues, museums, etc., give members of a community more options for connecting with literature as a means of unwinding, amusement, gaining access to information, and realising one's potential.

Schrag *et al.* (2015) observed that industrialised countries in Europe and the United States, whose cultures are centred on the printed word, are where public libraries first appeared. The first public libraries in the West were not lending libraries; rather, they were collections of Greek and Latin scrolls that were available in the dry areas of the several structures that made up the enormous Roman baths of the Roman Empire. In the genuine sense of the word, public libraries were present from the 17th century and could be found in a number of nations, including the United Kingdom, the United States, Poland, Canada, Australia, and others. According to Koontz, cited in Mamman (2015), public libraries were first established in the US in the middle of the 1850s with the

express purpose of addressing the demand for adult education brought about by the emigration of millions of Europeans to the country in quest of economic opportunity.

These immigrants were thrust into an unfamiliar culture and frequently had to acquire a new language out of necessity. New schools were established to educate and help the immigrants assimilate into American culture in an effort to accommodate these transplants. As a result, public libraries were designed and constructed throughout the nation to satisfy and increase the demand for adult education. Benjamin Franklin and Samuel J. Tilden both worked to build public libraries in the US.

Mamman (2015) highlighted that town libraries, which were notable in places like Norwich in 1608, Ipswich in 1612, Bristol in 1613, and Leicester in 1614, helped to give rise to the public library in the United Kingdom in the early years of the seventeenth century. More libraries were established in England and Wales after the Public Libraries Act was passed in 1850. As a result, by 1857 public libraries were present at Winchester, Manchester, Liverpool, Bolton, Cambridge, Sheffield, etc. In the late nineteenth century, Andrew Carnegie was also a significant contributor to the growth of public libraries in the United Kingdom. The objective of these libraries is to promote leisure time spent reading and having fun. Canada and Australia were among countries that made outstanding efforts in the history of public library development. In order to promote the meaningful use of leisure time for reading and entertainment, public libraries were founded in Canada in places like Quebec, Oakville, and Toronto. In 1809, public library service was established in Australia, thanks to Reverend Samuel Marsden when a public library was established in New South Wales. In later years, public libraries were established in Melbourne in 1856, Sydney in 1869, and Brisbane in 1898. The Library Act, which was passed in 1943, led to the development of more and

better public libraries around the nation with the intention of promoting leisure time used for reading and enjoyment.

African public library growth was encouraged by UNESCO. Since its founding in 1946, it has played a significant part in the eradication of illiteracy by launching numerous initiatives in sub-Saharan countries. Initiated by UNESCO and UNDP, the Experimental World Literacy Programme organises widespread literacy initiatives like adult literacy classes. Libraries were mentioned in its literacy program as one of the most efficient ways to combat illiteracy. To get the most out of information, UNESCO advocated the idea of "National Information Systems" (NATIS). This program promoted the development of comprehensive information policy and the building of suitable information infrastructure and networks (including libraries). As a result, UNESCO held many conferences in the Sub-Saharan African nations. According to the World Bank (2016), it began participating in the development of libraries in West Africa in 1953 when it held a seminar in Ibadan, Nigeria, on the topic. The seminar's report, which had an impact on the development of African library services, recommended that public libraries should support adult and basic education programmes, offer efficient services for children and teenagers, and encourage leisure reading. Additionally, it emphasised the need for low-cost reading material creation and suggested library schools to offer comprehensive professional training. Therefore, it is clear that UNESCO's involvement in the development of public libraries gave rise to public library services throughout Africa in general and Nigeria in particular a boost.

The public library can directly engage in supplying information to people in developing communities, such as through programmes for basic life skills, adult basic education, and AIDS awareness, according to IFLA (2016) in its guidelines for public libraries. This can help people in developing communities, improve their chances of daily

survival as well as their social and economic development. The public library should offer services to the illiterate and, if necessary, interpret and translate information in areas with a high percentage of illiteracy. Additionally, fundamental instruction on how to utilize the library's resources should be given.

2.2.3 Public Access and Public Libraries

Human development depends on having the ability to explore one's own creativity and new interests. Boongaarts (2016) argued that in order to do this, people must have access to knowledge and imaginative works. The public library can give people access to a wide range of knowledge and creative work that they are unable to obtain on their own, through a variety of various media. The researcher further added that, the public library still serves a crucial role in the community by offering access to significant collections of the world's literature and information, especially local literature. Access to creative and intellectual works makes a significant contribution to one's own education and a fulfilling leisure time.

Obasi (2015) asserts that public libraries and their services have already been significantly impacted by the continuing technological advancements and the rapid growth in the amount of information that is readily available. These changes have had a profound impact on how information is accessed. In order to fill this vacuum, public libraries must continue to offer material in conventional formats while also granting widespread public access to the Internet (where technologically feasible). In order to maintain their position as a key access point to online information services, public libraries should understand and make use of the opportunities presented by the ongoing and rapid advancements in information and communications technology (Pearson & Hall, 2015).

According to the United Nations (2015), public access is the most cost-effective, practical, and equitable way to attract the greatest number of new users. For this reason, public libraries are frequently one of the only locations where many people can access computers and the Internet. Public libraries and other community centres can be connected for a fraction of the price of getting to every premise (Pearson & Hall, 2015). In conjunction with support services, these public access facilities offer low- or no-cost basic access "entry points" that can raise digital literacy and increase demand for paid services. The availability of information and the abilities to use it is guaranteed by the more than a million libraries that exist worldwide.

A portal to knowledge, skills, and support, public libraries are a global network of 320,000 dependable, secure, and open spaces (73% of which are in developing and transitioning nations). Benson *et al.* (2018) asserted that as a result, while libraries are acknowledged for enhancing literacy, fostering culture, preserving and making heritage accessible, what frequently goes unrecognized is the role they play in ensuring equity of access to life-changing information and communications technologies that assist communities in resolving their most pressing problems. In a similar vein, Reid (2016) noted that libraries aid people in using the internet to acquire health information, advance their education, especially those who are marginalized, such as those who are poor, live in rural areas, or are disabled or of a specific gender, access online government services and find jobs.

Governments have numerous conflicting agendas, and resources that are always in demand (Siddiquah & Salim, 2017). Public libraries have similar traits that allow them to accomplish incredible things with minimal resources. They have a competent and experienced library staff who provide the public with support on technology and training, and supported by taxpayers who are integrated into the infrastructure of the

government. By promoting universal literacy, including media and information literacy, Bradley (2016) claimed that library services lead to better results across the SDGs and other government objectives, closing information access gaps, offering assistance to individuals without access, and assisting the government, civil society, and business to better comprehend local information needs. He continued that library services also give citizens a location to obtain government services as well as a network of locations where government programmes and services are delivered; promote ICT access and hire devoted employees to assist people in learning new digital skills to increase digital inclusion. They are the knowledge and heart of research in academic community, and help to preserve global culture, heritage and provides accessibility.

Another research by Public Libraries 2020 (2015) claimed that using libraries as community centres to provide access to the internet, instruction on how to utilize ICTs, and guidance on how to critically analyse the information accessible is an effective strategy to achieve connectedness over the next billion years. To help libraries and librarians improve the information and services they offer to patrons, training and resources are required. Governments can further rely on public library networks with very modest infrastructure and policy investments.

2.2.4 Libraries and the Sustainable Development Goals

Although libraries have a high degree of value provided at the institutional level, how valuable are they to the community in terms of achieving the SDGs? In response to this inquiry, Ejechi (2017) pointed out that, by actively engaging in the information-delivery process to residents of developing communities, such as through AIDS awareness campaigns, adult basic education, and basic life skills classes, public libraries can also make a significant contribution to daily survival as well as social and economic development. The value of a public library is frequently determined by the materials and

services libraries provide to the communities (Fischer, 2018). Public libraries are widely acknowledged to be of great value to their communities. According to Ejechi (2017), public libraries used to be primarily places where people could acquire written material and gather socially and physically. As new information technologies have emerged, public libraries' function and usefulness have expanded in the digitised era; workstations, more bandwidth, and computer training are a few examples of these. Public libraries serve as the only source of free Internet connection in certain localities nowadays. These service offerings frequently spark conversations on the importance of public libraries. The public library should therefore offer services to the illiterate and, if necessary, interpret and translate information in areas with a high percentage of illiteracy. The public library is functioning in these crucial areas as part of its role.

The public library serves as an agent for social and personal development and has the potential to be a productive force for change in the neighbourhood by fulfilling these fundamental responsibilities. The public library can benefit people and the community in both an economic and social sense (Ismail & Chi, 2018). This is because it offers a variety of resources to support education and makes information available to everyone. It helps people become more empowered to improve and develop their lives and the lives of the communities in which they live. It also contributes to the development and maintenance of an informed and democratic society. In traditional words, the goal of national development is to raise productivity in order to promote economic growth. According to Nilsson *et al.* (2016), the SDGs as adopted by the UN General Assembly in September 2015 in the presence of many Heads of States, consist of 17 goals and 169 precise targets. The Sustainable Development Goals (SDGs), established in 2015 are different from the previous Millennium Development Goals (MDGs), which were established in 2000 with the target year of 2015. They also include environmental aspects in addition to social and economic ones.

The Sustainable Development Goals (SDGs) and other national and international commitments can be achieved through connecting people to the internet (Nilsson *et al.*, 2016). They can accomplish this through encouraging governments, non-governmental organisations (NGOs), and corporations to support public access in libraries, which is consistent with the UN Internet Governance Forum's (IGF) mission to enhance libraries' contribution to information access for the general public. The public library serves as an agent for social and personal growth and has the potential to be a productive force for change in a community (Lawson, 2016).

Fischer (2018) emphasised the significance of public libraries as having adequate resources, in order to fulfil its roles satisfactorily; the public library must have adequate resources not only when it is established but also on an ongoing basis, embracing emerging technologies as they are introduced into society, enabling it to maintain and grow services that cater for the needs of the society. This implies that it should provide materials and services in all forms, up-dated periodically to suit the changing needs of groups and individuals, including newly-published and replacement content as well as new information technologies available and which can be supported. In order to fulfill its crucial function in the community, it should also offer adequate levels of employees, training, and funding to support whatever service delivery strategies are required. According to Abata-Ebire *et al.* (2018), the public library can benefit people in both an economic and social sense by making information available to everyone and by offering a variety of resources to encourage education in the community. It serves to empower individuals in the enrichment and development of their lives as well as that of the community in which they live. It also contributes to the formation and preservation of an informed and democratic society. In order to contribute to community debate, the public library should be informed on the topics under discussion. Slovenia, Bostwana,

Uganda, and Sri Lanka's libraries have already aided in the achievement of particular SDGs.



Figure 2.2 Pictorial representation of Sustainable Development Goals

Source: UN (2018)

Public libraries around the world engage in significant activities that have a significant impact on people's lives and work toward attaining the SDGs. In order to implement each of the activities listed by the UN (2018), public libraries around the world should conduct significant global initiatives aimed at attaining the SDGs and improving people's lives. In order to carry out each of the sustainable development objectives, the UN (2018) specified the following actions that public libraries worldwide undertake:

SDG 1: End global poverty in all its forms: People can better their lives and encourage informed decision-making by using libraries. In rural and remote places, mobile libraries make literature, services, and internet access accessible, giving those who might otherwise be alone options.

SDG 2: End hunger, ensure food security, boost nutrition, and advance sustainable agriculture: Access to crop research, market data, and farming techniques is made

possible through agricultural libraries, resulting in more resilient, long-lasting product. Public and community libraries also support local development by building partnerships, promoting literacy, offering ICT training, access to information in local languages, and serving as a doorway to government services and funding for remote communities.

SDG 3: Ensure everyone lives in good health and promotes wellbeing at all ages: Access to medical research that supports better clinical and societal health outcomes is made possible through medical libraries and hospital libraries. All libraries should provide public access to health information to assist individuals maintain good health and make better lifestyle decisions. Public libraries play a crucial role in providing vulnerable populations with health information, including recent immigrants and those who are homeless. Accessing trustworthy health information, improving health literacy, and assisting with research and purchasing the right health care are just a few of the services offered.

SDG 4: Promote opportunities for lifelong learning for all people and ensure inclusive and equitable quality education: Every country's schools, colleges, and institutions are built around their libraries. Every library supports literacy initiatives, offers a secure environment for studying, and aids researchers in accessing, reusing, and using research and data to produce new knowledge. Libraries can respond to local needs and act to improve education by offering practical computer training, after-school assistance, and programmes tackling subjects with high failure rates, to name just a few examples. Additionally, libraries serve as learning facilitators in their neighbourhoods by establishing neighbourhood learning centres.

SDG 5: Achieve gender parity and provide all women and girls the power to succeed: For women and girls to receive knowledge about their rights and health, through library

programmes. They also provide coding clubs, entrepreneurship training, and ICT and literacy programmes. Libraries offer a secure setting for women to read, further their education, use computers and the internet, train in technology, and interact with other women.

SDG 6: Ensure that everyone has access to water and sanitation services that are managed sustainably: Public access to knowledge on energy use, water use, and cleanliness is made possible through libraries. For the purpose of facilitating the efficient allocation of funds to long-term water infrastructure and sanitation projects, they provide access to research and evidence for decision-makers and development organizations.

SDG 7: Ensure that everyone has access to modern, dependable, cheap energy: Around the world, many public and community libraries are the only locations where individuals can consistently access light and electricity to read, study, and submit job applications. Public computers can be made available in libraries and library-like rural information centres. These computers may occasionally be powered by solar panels or generators, enabling people to hold meetings, charge devices, and access the Internet at night.

SDG 8: Decent labour and productive employment: People can apply for jobs, thanks to training offered at libraries and public access to ICTs. People who do not have access to computers or the Internet at home visit libraries to find these resources as well as knowledgeable library employees who can assist them with writing curriculum vitae, sending online applications, scanning degrees and certificates, and locating the ideal position. Some libraries offer career clubs where job seekers can connect and share advice and information.

SDG 9: Foster innovation while building resilient infrastructure and promoting inclusive and sustainable industrialization: Research, technology, innovation, and academic life all revolve around libraries. To promote innovation and competitiveness, they make research infrastructure, data, and high-quality information accessible. Some libraries run business centres where entrepreneurs can receive training in entrepreneurship as well as legal and financial guidance to help them launch their firms.

SDG 10: To lessen inequality within and between nations Independence of the person is fundamentally based on equitable access to information, freedom of expression, freedom of organization and assembly, and privacy: By offering these services, libraries provide secure public areas that are accessible to all. Through regional initiatives and collaborations with local governments and other civil society organizations, they promote community involvement and public participation. They are a lifeline for disadvantaged populations that may find it difficult to find resources, training, or assistance elsewhere.

SDG 11: Create inclusive, secure, resilient, and sustainable cities and human settlements: in order to maintain and preserve priceless documentary history in all of its forms for future generations, libraries are crucial. Libraries are at the centre of activities to promote this because culture helps inclusive and sustainable city development and strengthens local communities. Libraries offer a secure environment for senior citizens and possibilities for social interaction, with specific programmes to address the most vulnerable groups.

SDG 12: Promote sustainable patterns of consumption and production: In order to ensure that everyone has access to information, libraries are sustainable institutions that exchange resources both within and outside national boundaries. Libraries are the forerunners of the new sharing economy because they lend out a wide variety of items

(including tools, musical instruments, appliances, and more) and reduce their carbon footprint and environmental impact. These materials include books, music, movies, and all types of information resources. People can use recyclable materials to build their own creativity in libraries that provide access to 3D printers and digital manufacturing abilities. This promotes environmentally friendly consumption and manufacturing. Libraries play a crucial role in providing access to reliable data, research, and knowledge that support informed research and public access to information about climate change.

SDG 13: Take urgent action to combat climate change and its impacts: Through comprehensive preservation strategies that outlast the policies of individual governments, they guarantee future generations' access to environmental data and information for a long time. Younger generations are made more aware of the urgent need to protect the environment and the importance of cooperating to lessen and prepare for the effects of climate change through the use of public and school libraries.

SDG 14 - Conserve and sustainably utilise the oceans, seas, and marine resources for sustainable development by maintaining and providing access to data and knowledge about the sustainable use of oceans, seas, and other water bodies, proper fishing techniques, and efficient water management, libraries aid in decision-making.

SDG 15: Stop, reverse, and promote sustainable use of terrestrial ecosystems; protect and manage forests sustainably; prevent desertification; and stop the loss of biodiversity: By providing free access to books and data on biodiversity, libraries encourage research and contribute to the preservation of the planet's ecosystems. Younger generations can learn more about the importance of protecting and preserving nature by visiting botanical and forest libraries.

SDG 16: Promote peaceful and inclusive communities for sustainable development, ensure all people have access to justice, and promote the establishment of effective, accountable, and inclusive institutions at all levels: One of the most important sources of Information for the general public is primarily found in libraries. Additionally, they have the means necessary to impart knowledge and give citizens access to this free information. Libraries are a dependable source of information with knowledgeable staff who assist people, organizations, and governments in communicating, organizing, structuring, and using information in a meaningful way to further development.

SDG 17: Strengthen implementation mechanisms and reenergize the global partnership for sustainable development: Libraries collaborate on a variety of levels with local, regional, and national government agencies, corporate sector organizations, and institutions of civil society to provide community-based programme and services that engage and empower people, thereby developing societies.

Practically, lives are being affected positively by the public libraries in line with the sustainable development goals in different sectors as indicated:

SDG 1: Reduce poverty.

According to Ljubljana City Library (2016), the Employment Information Service (EIS) was established by the Ljubljana City Library and helped roughly 1,200 people each year find employment in Slovenia. They learned how to polish their resumes and submit job applications at the library. Many of these individuals were in need of social assistance or were homeless. The library and the Centre for the Prevention and Treatment of Drug Addiction at the Psychiatry ward of the University Hospital in Ljubljana currently collaborate to promote the rehabilitation and reintegration of drug-abusing individuals into the community. The e-Library Nenasala Programme is a

government-sponsored effort in Sri Lanka to enhance digital literacy and access, according to Global Libraries (2014). The 300 centres across the nation are accessible to everyone and provide the most reliable method of access to infrastructure in many isolated and underdeveloped regions.

SDG 2: Sustainable agriculture.

In Romania, public library employees collaborated with local government to assist 100,000 farmers use modern ICT services to qualify for agricultural subsidies, resulting in US\$187 million reaching local communities in 2011–2012, according to the International Research and Exchanges Board (IREX, 2015).

SDG 3: Healthy Lives and wellbeing.

According to the Global Libraries Atlas (2015), 87% of library users in Botswana reported that the health information they discovered through the use of public library services had benefited their health. Hospitals, government agencies, associations, and other healthcare-related institutions in Australia, according to Australian Libraries Information Association (ALIA) (2014), receive a \$5 return on every \$1 they invest in libraries. An extensive nationwide tuberculosis (TB) prevention and control programme was started by the Kyrgyz government. In order to engage public libraries to assist governmental objectives, the Kyrgyz Libraries Information Consortium (KLIC) "No to TB!" service collaborates with civil society organizations including Project HOPE and the Red Crescent Society. Initiatives titled "No to TB!" were set up in 190 rural libraries, and 800 people received training on how to spread awareness of the disease. Additionally, 5,600 people attended public debates. According to Electronic Information for Libraries (EIFL) (2014), the Makerere University library's Uganda Health Information Digest repackages scholarly information in print format for health workers who cannot access the information online. The Digest contains abstracts of

current diseases and medical problems. In addition to hospitals, health centers, dispensaries, health-related NGOs, district medical offices, all district health and social services committees, and members of parliament, it is given to more than 1,500 health units. When a disease outbreak like hepatitis occurs in a distant place, The Digest is one of the few sources of current information available.

The National Information System of Medical Sciences of the Ministry of Health includes a number of libraries, information centres, and other organizations that work together to build the first electronic health information network in Cuba, known as Infomed.

SDG 4: Possibilities for lifelong learning.

According to IFLA (2016), Botswana's public libraries have made significant progress toward assisting the government's goals under its National Vision 2016 plan, including introducing ICT access, enhancing library patrons' computer skills, and empowering patrons to be successful in their careers. Boekstart (Bookstart) provides books and literacy instruction to 75,000 kids annually in the Netherlands through partnerships with day care and healthcare facilities, public libraries, and the first two years of primary school. The programme, which has the backing of both the federal and municipal governments, intends to foster ongoing cooperation between organizations that promote literacy among young people. According to Center for an Urban Future (2013), there are adult learning centres at 19 library branches in New York City that provide classes in pre-GED, English for Speakers of Other Languages (ESOL), adult literacy, citizenship, and ICT skills. The city's Workforce Career Centres provide job placement assistance through four locations in the Bronx, Brooklyn, and Queens.

SDG 5: Empowering women and girls

According to *Beyond Access* (2012), the National Library of Uganda has offered ICT training especially created for female farmers. This training makes sure that these women can access weather forecasts, crop prices, and support to set up online markets, all in their native languages. For female farmers, the National Library of Uganda offers an ICT training programme that gives them access to weather forecasts, agricultural prices, and assistance in setting up local language online markets. Through technology skills, this programme improves the economic well-being of women.

SDG 6: Ensure availability and sustainable management of water and sanitation for all.

San Juan Planes Community Library (Honduras) is instrumental in ensuring that safe drinking water is available to everyone in the community through a water treatment project.

SDG 7: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Around the world, many public and community libraries are the sole locations where individuals can reliably access light and electricity to read, study, and submit job applications. ICT, study spaces, and classes on mobile phone usage are all accessible to the public at the Katatura public library in Namibia.

SDG 8: Decent labour and economic productivity.

According to the *Global Libraries Atlas* (2015), in Ukraine, 1 in 3 public library users used the facility's technology for business communications, and 62% of those who used the services to apply for jobs ended up getting one. According to *Public Libraries 2020* (2014), in the European Union in 2012, 4.1 million persons utilized public libraries'

computers to support employment-related activities, with 1.5 million of those users using the computers to submit job applications.

The Science, Industry and Business Library, Queens Public Library, and Brooklyn's Business & Career Library (B&CL) all host well-known business plan competitions that provide participants with advice, focusing on current and potential business owners from underserved communities, according to the Center for Urban Future (2013). Every year in the European Union, about 250,000 people get jobs through their local public library. Since all occupations now require applicants to submit applications online, anyone with access to ICT and the necessary abilities can apply for employment.

SDG 9: Infrastructure, Industry, and Innovation.

According to Tresais (2012), from 2008 to 2010, every dollar spent on public libraries in Latvia resulted in the creation of roughly \$2 in value (direct and indirect), through the profitability of public computer and Internet use. According to IFLA (2016), the current government of the USA started the ConnectED Library Challenge, a pledge by more than 30 towns to provide every student a library card so they can access the educational materials and leisure reading materials found in America's libraries. Through a smartphone, laptop, and video conferencing project, schools hundreds of kilometers distant in isolated regions of western Kenya and Uganda are participating in vibrant debates, quizzes, and spelling bees. The library looked at methods of connecting to the internet via the cell phone network because few rural schools have internet access.

SDG 10: Reduce inequality within and among countries.

The Queens Library's New Americans Programme helps new immigrants integrate by offering resources, English language instruction, events, and information about daily life. The American Place Program at Hartford Public Library (USA) aims to acquaint

newcomers with their new community and make their transition easier. TAP fosters the vibrant ethnic diversity and shared civic ideals of Hartford. Information and assistance with applications for citizenship, residence, subsidized housing, and government benefits are all available through the Toronto Public Library through Canada's newcomer settlement services.

Armed gangs took control of Timbuktu in 2013, a city renowned for its cultural heritage and for housing numerous public and private libraries with priceless historical records. With the aid of international assistance, volunteers sneaked the manuscripts into safety to Bamako during the occupation. The manuscripts are currently being restored and digitalized while being housed at the nation's capital. The evacuation and preservation of Mali's distinctive heritage has been led by libraries.

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

ISIS has put Iraq's cultural heritage in grave danger right now. There have been reports of ruined documentary history in the country's northernmost regions, which are under occupation. The National Library of Iraq seeks to preserve cultural heritage through digitization, prevent its loss, and provide public access to it. The urban renewal project of the city of Medellín, Colombia, is not complete without public libraries. They have developed into social development hubs that respond to a recognized need for more space for culture and education. They are strategically located in some of the most underprivileged neighbourhoods on the outskirts of Medellín. The Library Parks are a collection of public libraries that serve the local communities by providing educational resources and programmes. They also serve as a focal point for additional urban development and environmental projects. Libraries were quick to respond to the Nepal earthquakes in April and May 2015 and protect both their special collections of cultural heritage and the rest of their assets. To ensure that customers could access the materials,

temporary tents were set up. Material that was rare and delicate was transported to secure storage locations. Libraries are currently looking for assistance with the urgent digitization and preservation of damaged resources.

SDG 12: Promote sustainable patterns of consumption and production.

The sustainability of libraries by sharing resources throughout the community and ensuring that everyone has access to information, materials are circulated. To guarantee that all nations have access to information, libraries work together internationally to lend books to one another.

SDG 13: Combat climate change and its effects with immediate effect.

For informed research and public access to information about climate change, all libraries play a critical role in providing access to data, open education resources, expertise, and research. Local and heirloom plant species that would go extinct are preserved by seed libraries. By building collections of seeds that are regionally tailored to the area, lending and returning seeds eventually support local agriculture.

SDG 14: Protect the oceans, seas, and marine resources and ensure their sustainable use for development. For informed research and public access to information regarding coastal conservation, all libraries play a key role in providing access to data, research, and expertise. Since many library services are offered by boat, the National Library of Indonesia plays a significant part in raising the level of literacy and education for the population dispersed over thousands of islands where education is more difficult to access.

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss. Libraries play a significant part in the preservation of

indigenous knowledge, which includes regional decisions on basic parts of life including hunting, fishing, land usage, and water management.

SDG 16: Foster peaceful and inclusive societies for sustainable development, ensure that everyone has access to justice, and create inclusive institutions at all levels. Libraries in Moldova are participating in the Open Government Partnership (OGP) action plans, a forum for promoting pledges to open government and accountability between the government, civil society, and business. The National Parliamentary Library of Ukraine was in the centre of clashes in 2014, Kiev protests. The library welcomed those who had been hurt during the war and those who needed a place to rest and feel safe. The American Library Association is associated with the non-profit legal and educational group known as the Freedom to Read Foundation (FTRF). The First Amendment to the Constitution is safeguarded and defended by FTRF, which also supports the right of libraries to gather information and that of citizens to access it.

SDG 17: Boost the global collaboration for sustainable development and strengthen its implementation. The capacity of humans to discover and validate information will become increasingly important in a future where the volume of digital content is expected to quadruple every two years. IFLA set the standard for the development of recommendations for Media and Information Literacy (MIL). MIL describes the human rights-respecting information access, use, and communication knowledge, attitudes, skills, and practices that are necessary. The public can access the Internet for free or at a cheap cost thanks to libraries. Public and academic libraries are frequently the primary or only sources of this access.

2.2.5 The Concept of Information Communication Technology

Information technology is a broad phrase that refers to the generation, modification, storage, and transmission of information between machines and humans worldwide in a

variety of formats while utilising a variety of electronic technologies to accomplish a goal (be it recreational, or otherwise). ICT (information and communications technology - or technologies) was defined by Crist (2015) as an all-encompassing term that includes any communication device or application, including: radio, television, cellular phones, computer hardware and software, satellite systems, and more, as well as the various services and applications associated with them, like video conferencing and distance learning.

Menon (2019) pointed out that, although ICTs are the digital processing and application of information by the use of electronic computers, they are frequently discussed in a specific context, such as ICTs in education, health care, or libraries. It includes information storage, retrieval, conversion, and transmission. The phrase is frequently used as a synonym for computers and computer networks, but it also refers to other means of information dissemination, including telephones and television. According to Rifkin (2014), ICT includes all computer and communications hardware, software, and tools needed to produce, plan, store, send, understand, and modify information in all of its forms. There are a wide variety of technologies available today, including personal computers, laptops, tablets, mobile phones, transportation systems, televisions, and network technologies.

Information technology was viewed by Mamman (2015) as a tool for using science to collect, store, process, and move information. Information and communications technology (ICT) was defined by Ericsson (2015) as all the technologies involved in managing telecommunications, broadcast media, intelligent building management systems, audio-visual processing and transmission systems, and network-based control and monitoring tasks. ICT, as defined by Rouse and cited in Mamman (2015), is a broad term that refers to all communication devices or applications, including satellite

systems, radio, television, mobile phones, computer and network hardware, and so forth.

All of the definitions agree that information needs to be created and shared. Additionally, they claim that such data must be digital or electronic. ICT and IT are often not limited to just computers; telecommunications equipment (such as mobile phones, printers, and scanners) is also mentioned in the definitions. Hoffman (2016) pointed out that ICT and broadband are being used globally with a strong social purpose to improve health, education, payments, economic development, agricultural productivity, and even peace-building. In a previous research, Lawson (2016) proposed that public libraries have been in a perpetual state of self-evaluation, re-envisioning, and change since the widespread use of the digital environment, the Internet, computers, and rapidly evolving technology that seem to evolve daily. Because of the speed and scope of technological progress, public libraries are undergoing significant change.

As a result, libraries' importance and function have been extensively discussed in a variety of fields and venues. Studies, discussions, conferences, and articles have all been produced with a focus on the function and future of the public library. The constantly shifting economic, intellectual, and demographic conditions in which libraries currently operate are fuelling this active and thoughtful discussion of the public library's future. These ecosystems are no longer static; rapid change is taking place. Numerous additional demands are placed on the public library by the ongoing trend toward globalisation, a knowledge economy, and a focus on speed, creativity, and innovation. All of these changes at once have disrupted traditional library operations, employees, and patrons.

Therefore, it is important for public libraries to become more flexible organisations to deal with ongoing change, in addition to making structural and personnel adjustments to

meet the needs of the 21st century. Accordingly, Gruber *et al.* (2015) claimed that the education sector cannot be excluded from this revolution and that it is almost impossible to function effectively in any aspect of human life without the involvement of ICT. This is due to the fact that ICT enhances anything it is applied to, making any sort of service quicker, more effective, and better. Because they have an impact on all facets of human existence and because they give students and teachers more flexibility in adapting teaching and learning to specific student requirements and national priorities, Barker (2016) characterised ICT as tools that are making a noticeable change in society. Hoffman (2016) stated that there is no doubt that ICT has had an impact on the calibre of instruction, learning, and research at traditional and distant learning institutions. According to Hassan and Unwin (2017), information technology has taken centre stage in our evolving society, which is also characterised by a significant rise in knowledge.

Bekaroo *et al.* (2016) noted that Library Information Science schools all over the world now have very high expectations due to the significant changes in the global information landscape, where ICT is the driving force. The emphasis is on the need to generate graduates who can thrive in the dynamic information environment of the twenty-first century. According to Global e-Sustainability Initiative, GeSI (2016), libraries have been around for many centuries without the use of ICTs. However, as technology spread throughout the world, public libraries embraced these resources as a way to bypass some of the tedious chores involved in overseeing vast collections. It is almost impossible to overstate the importance of using ICT in public libraries to reach a wider clientele. ICT and public libraries work well together as a tool for spreading and carrying out the Sustainable Development Goals.

Stiglitz (2015) provided an account of the role of Welsh public libraries in promoting reading and using information and communication technologies (ICT) in the reading

development process. This is another illustration of how ICT is having an impact on self-development in libraries. Public libraries, in the author's opinion, have a long history of supporting literature and fostering reading, and this has contributed to numerous national and worldwide advancements. The training programme created for all public library personnel and customers in Great Britain for the Peoples Network included instruction on the use of ICT for reader development. According to a report on the Peoples Network's preliminary findings, 40% of non-members who visited the libraries to utilise the computers afterwards became members. If ICTs are used in reader development initiatives, similar results can be attained in Nigerian public libraries. The advantages of using ICTs in libraries also include the provision of endless and current information from many sources, as well as the flexibility of information to be used by users in accordance with their needs. ICTs, according to Ericsson (2015), make it possible to find, filter, organize, deliver, and share information more successfully than in the past. ICTs present libraries with a variety of opportunities. Online information services, data information services, internal computer systems, and electronic office systems are a few of them. The author goes on to say that the creation of broad and niche computerised data banks and databases is how computer technologies are used to store and retrieve information. Ochoa and Pinto (2017) stated that the advent of online information sources is altering how library collections are used in developing nations because most libraries are now making investments in them.

ICTs have the capacity to electronically assemble required resources, making research activities more practical and effective. It is viewed as a remedy and an ideal tool for boosting the effectiveness and efficiency of service delivery in the library and information worlds. According to Essien *et al.* (2022), ICTs provide new methods for providing services in library operations and make it easier to disseminate information to library users than the manual or traditional method, which is laborious. On the other

side, ICT has also led to the creation of enormous amounts of information, some of which can be difficult to access. According to scholarly theories, the prospective benefits of ICTs are quickly materialising due to the continuous acceptance and widespread adoption of the new technologies. According to Eurostat (2017), technology is being used more frequently in library activities and is quickly gaining acceptance in the delivery of library and information services. The computer has a large quantity of memory and can store a lot of data. These, together with external storage hard disks, have given libraries the power to economize space while also giving their customers efficient service. Additionally, internet resources enable librarians to offer their clientele value-added information services. ICT is being utilized more and more to provide information in libraries of all kinds.

International Telecommunications Union (2016) opined that another benefit of employing ICTs in libraries that has gained importance is the improvement of operational and service efficiency. ICTs are currently being used by libraries to automate every aspect of their operations, from technical support to efficient reference and information services, as well as network operations including cataloguing, authority management, interlibrary lending, and bibliography compilation. According to Stiglitz (2015) computers have given libraries the power to execute library operations like loans, controls, database design, and implementation. Zastrow (2015) opined that information transmission has rapidly changed over the past 20 years, moving from a manual system to one that is technology-driven. The author argued that the positive interaction between libraries and ICTs presents a challenge for librarians and information workers to continuously examine and modify their expertise, technology, services, and client outreach strategies. In addition, Barker (2017) suggested that ICT can improve public library services by automating processes, overcoming obstacles, and contends that using ICTs in library operations can be cost-effective in terms of

information production, storage, retrieval, and dissemination. Modern technologies give information scientists and librarians a variety of tools to aid them in achieving their objective of offering people better services.

According to Davenport and Kudygba (2016), the information revolution and extraordinary growth in the dissemination of knowledge have created a new era of knowledge and information that directly influences economic, social, cultural, and political activities in all parts of the world, including Africa. The potential impact of information and communication technologies on socioeconomic development has been acknowledged by governments all over the world. Libraries are therefore becoming more conscious of the fact that, in order to play cartelistic responsibilities in supporting information access as the foundation for the socioeconomic growth of their countries, they must utilize ICTs to increase the scope and quality of service to their clientele (Global Libraries Atlas, 2015).

2.2.6 Public Access and Information Communication Technology

Information is crucial to the growth of the person and of society, and information technology gives those who can access and use it significant influence (Gruber *et al.*, 2015). Siddiquah and Salim (2017) stated that, despite its rapid expansion, much of the world's inhabitants lack access to information, and the gap between the information rich and the information poor continues to expand in some regions. In affluent nations, sources of widely available public information including public libraries, telephones, mobile web services, and television broadcasts are taken for granted. However, according to IFLA (2017), such infrastructure is severely lacking in underdeveloped nations, which makes it difficult for people to learn new information and find solutions to problems. The Internet holds forth hope for improving internal communications within and between emerging nations. Meidan (2018) contends that internet

accessibility is essential for social, economic, and educational chances, with information access determining who has opportunities and who does not. Meidan added that having access to information enables people to exercise their political and socioeconomic rights, participate in the economy, pick up new skills, and hold their governments accountable. It also supports innovation and creativity, builds identity, and promotes transparency. Despite the fact that there are more than three billion Internet users globally, only 50% of people have access to the internet. Only 16% of people in the world's poorest countries and only 53% of people worldwide will have access to the internet by 2020, according to the Alliance for Affordable Internet.

Bales (2016) reaffirmed that governments have come to understand the value of accelerating access to information and the Internet, particularly through public access, to support social and economic development through multilateral, bilateral, and international agreements. The 2030 Agenda for Sustainable Development, according to the UN (2015), calls for universal literacy, acknowledges the importance of information access, and names ICTs and the internet as horizontal enablers for growth. It aspires to give everyone inexpensive access to information and communications technologies and to dramatically increase access to information is essential, and the internet and ICTs are recognized as horizontal growth enablers. By 2020, it especially seeks to greatly expand access to information and communications technologies and offer affordable, universal internet access in developing nations.

According to IFLA (2016), the African Union's Agenda 2063 calls for altering Africa's economic and social environment by enabling the unconnected to engage in the rapidly growing digital economy that would generate enormous prospects for growth and transformation. The Internet Governance Forum is advancing its ground breaking research on policy options for connecting and enabling the next billion (or billions),

which is concentrated on creating a set of policy options aiming at the creation of enabling environments, including deploying infrastructure; improving usability; enabling users (for example, through ICT training and literacy resources; assuring affordability). The World Summit on the Information Society (WSIS) recognizes the significance of a society in which everyone can produce, access, use, and share knowledge, enabling individuals, communities, and peoples to realize their full potential in promoting sustainable development and raising their standard of living. Additionally, it acknowledges the important contributions public access facilities have made to connectivity and sustainable development in numerous nations.

According to UN (2018), the Global Link Initiative, a goal to connect the next 1.5 billion people worldwide by 2020, was launched by the US State Department in collaboration with the World Bank and International Monetary Fund (GCI). Public access is encouraged by the GCI Guiding Principles, for instance at public libraries and community centres, increasing digital literacy and encouraging the creation of locally relevant information, applications, and services, all of which are crucial for the broad use of the Internet and its subsequent social and economic growth. Public access is crucial for providing connectivity to underserved communities, but it is usually disregarded or left out of legislation in developing nations that strive to attain universal broadband. In order to achieve the SDG target of universal access, according to DeGood and Madowitz (2015), governments will need to make significantly greater investments in the creation of widespread low-cost or free public access facilities, targeted in particular at women, rural residents, and people living in poverty. A new global social compact is required, according to the Global Commission on Internet Governance, to advance a single, open, and secure Internet for all and for government spending in institutions like schools and libraries to open up access for groups with constrained options due to geography or income. In its recent 'Internet for All' report, the World

Economic Forum (2016) noted that there are four main factors preventing more people from using the internet: infrastructure; affordability; knowledge, awareness, and cultural acceptance; and local adoption and use, which is frequently hampered by a lack of local content. According to the World Bank (2016), public libraries are the best places to offer public access to ICT since they can provide both connectivity for everyone and the opportunity for individuals to participate in the new digital world.

2.2.7 Sustainable Development Goals and Information and Communication Technology

According to Ericsson (2015), information and communication technology (ICT) has significantly fuelled and enabled social and economic advancement in recent decades, providing society with a number of positive outcomes. Although some cultures have benefited from these advantages, they are sometimes distributed inequitably over the world and may not be properly utilized to promote sustainable development. In this regard, the World Economic Forum (2015) noted that the SDGS are distinctive in that they were developed through a partnership between civil society, governments, multilateral institutions, and the private sector. The SDGS and ICT could help countries develop in ways that are both economically and environmentally sustainable.

ICT serves society in different ways. ICT is essential in helping organizations access information, enabling people to communicate with one another, and scaling development by finding more efficient ways to deploy and utilize resources. There is no shortage of research demonstrating the economic benefits from ICT. Unwin (2017) pointed out that, although digital and ICT technologies have quickly proliferated throughout much of the world, their use and application in resolving social and environmental issues have lagged behind and is still far from being understood.

Lutz and Butz (2015) noted that, governments and businesses must support technological advancements that emphasise and facilitate sustainable development if they want the world's population to live up to its potential in an environment where resources are becoming increasingly scarce. The use of ICTs as change accelerators can also be utilized to emphasise various impacts (Adeleke, 2017). He also notes that the key advantages of ICTs for people, communities, and economies include improved access, connectivity, and efficiency. Infrastructure, access, and skills are three of the key components that must be in place for ICTs to support economic growth, according to Ericsson (2015). The author goes on to say that these three enablers are not mutually exclusive and that successful development frequently calls for a combination of all three. Through these three enablers, ICT can scale and speed up sustainable development when combined with sensible policies and services.

Barker (2016) emphasized that several components must be in place for ICT to assist effectively in achieving the SDGs. These components include appropriate universal infrastructure, reliable electricity, inexpensive technologies, especially for the poorest and most disadvantaged, and individuals who have the necessary knowledge and abilities to use ICTs to improve their lives. People also need to have the knowledge and abilities and take advantage of connection (Eurostat, 2017). This knowledge includes not only how to use the Internet to find useful information, but also how it can be used to better their lives. As a result, the Global e-Sustainability Initiative (2016) added that increased access to education in general is essential for increasing Internet usage. Such instruction goes much beyond only learning digital skills.

Additionally, designers must do much more to make such technologies easier for marginalized groups to utilise and more intuitive. Since ICTs may be utilized to improve health, employability, and knowledge gain through information acquisition as

well as improved communication, education must instil an awareness of this fact. In this context, a recent study by the Organization for Economic Cooperation and Development (OECD) (2016) is notable because it reveals that while the less advantaged and less wealthy tend to use the internet primarily for games and socializing with friends, the already advantaged group uses it more effectively to advance their careers. Contrary to popular belief, underprivileged students in all OECD nations spent half as much time online as their advantaged counterparts.

While advantaged students utilized it for news collection or information gathering, disadvantaged students preferred to chat or play video games instead of using it for constructive objectives. Additionally, education is necessary to properly inform individuals about the dangers associated with ICT use as well as the privacy and security concerns that must be taken into account. Furthermore, according to Barker (2016), it is critical to recognize the two major ways that ICTs can support the SDGs: directly by improving the lives of specific poor and marginalized individuals, and structurally by facilitating the achievement of all of the SDGs.

2.2.8 Demographic Variables and Sustainable Development Goals

By successfully implementing the recently adopted Sustainable Development Goals, the rate of population growth around the world could be reduced (SDGs). The SDGs are fundamentally centered on equality, according to (UN, 2015). Ending disparities, assisting those who are difficult to reach, and ushering in a life of dignity for all depend on population statistics and analysis. The Sustainable Development Goals (SDGs), whose goals for health and education have an impact on population trends both directly and indirectly, provide another justification for aggressively pursuing their adoption and complete implementation. For development planning and tracking the new Sustainable Development Agenda's progress, accurate, timely, and accessible population data are

crucial. According to Lutz and Butz (2015), variations in world population estimates are caused by various methods used to break down national populations based on age, sex, and educational levels and to combine statistical extrapolation with subject-matter expertise when defining assumptions for the future. The development of a development strategy that supports the implementation of the SDGS must be guided by accurate data on the size, growth, distribution, and characteristics of the population. This data is also essential for evaluating the progress made in achieving the SDGS.

Demography is the study of the dynamics of population change, notably fertility and its relationship to new born, child, and maternal mortality. Demography is crucial for measuring, evaluating, explaining, and determining policies to hasten Africa's growth. These numbers are crucial for monitoring development. According to Barder (2015), measuring the development agenda's progress is currently of great importance to governments and the international community. The majority of the justifications offered thus far for Africa's success in achieving its development goals centre on economic development, particularly economic growth. Less consideration is given to social development, notably the changing demographics and population, while describing Africa's accomplishments and formulating future development plans.

Additionally, governments and the international community must acknowledge the challenges and opportunities that Africa's population distribution is presenting for development. According to Boongaarts (2016), improving women's education and addressing excessive fertility should be the top priorities so as to improve gender equality and women's position and to make quick progress in reducing infant, child, and maternal mortality. This necessitates taking into account demographic dynamics and trends, such as rates of population growth, fertility, and mortality, as well as age and demographic characteristics of the population, such as migration and urbanization, as

well as its spatial distribution. The quality and availability of data, which are important obstacles to well-informed decision-making and evaluating progress on the development agenda in Africa, heavily influence the quality of demographic research and studies. According to the author, policy research, as well as a more thorough, holistic, and accurate understanding and measuring of countries' development progress, suffer from a lack of precise, reliable, and continuous data.

Governments require accurate data to recognise problems, identify areas of improvement, make educated decisions, create and implement the ideal combination of policy actions. Demography plays a vital role in identifying target population groups for in-depth analysis, policy interventions, and other actions, in addition to evaluating levels of demographic behaviour and trends in population change. Social changes are shown by demographic patterns. Demography therefore has a significant role in determining both an individual's and society's welfare.

After age and sex, education is the most significant factor in observable population variability. This matter because more educated women generally have fewer children, have lower child mortality, and live longer as adults during demographic change. Forecasts for the population alter as the educational profile does. Education is important. Human capital, which is a fundamental factor in socioeconomic development, and individual empowerment are both strongly influenced by education (public health, economic growth, quality of institutions and democracy, and adaptive capacity to climate change).

2.2.9 Problems Militating against the Performance of Libraries as an Educational Tool for Implementing Sustainable Development Goals

The shocking illiteracy rate and low reading culture present libraries with their biggest obstacle to achieving the SDGs at the moment. The majority of the knowledge in public

libraries is printed, and the majority of the people are illiterate. Obasi (2015) noted that there have been issues with the development of public libraries in Nigeria, including the low number of branch libraries, the lack of ICTs, a weak rural information network, low literacy rates, and the absence of mobile library services, community information, human resources, and information resources. Iroka and Ndulaka (2018) claimed that, in addition to illiteracy, there is also a lack of enthusiasm in reading among those who are literate. In summary, the following issues are listed:

Infrastructure issue: In this modern day, one of the biggest issues that many Nigerian libraries confront is lack of adequate ICT facilities. According to Ejechi (2018), this is due to the ICT infrastructure's poor development pace and lack of funding. The available ICT infrastructure is also not well maintained. To supply services easily and widely, communication infrastructure is needed in rural regions to facilitate the SDGs' implementation process.

Insufficient human resources, according to Iroka and Ndulaka (2018) innovation, contemporary technology, user experiences, general resource management, and service provision are all part of the change process. It is necessary to train librarians and other library employees on how to implement or manage changes. It is clear that libraries need workers who are properly trained. The training of library employees in Nigeria to implement sustainable development is insufficient. To generate employees that can provide services in a knowledge-based society, education and librarianship need to be reorganized. Libraries in Nigeria must invest in the intellectual capital of their staff if they are to serve as centres of instruction for sustainable development.

According to Ejechi (2018), even if libraries are motivated and able to carry out their responsibilities efficiently, a lack of funding can be a barrier to them realizing their mission. In Nigeria, many public libraries, particularly those in more rural regions, lack

the funds to install computers, buy pricey books, or create an Internet connection. Because significant ICTs are typically more expensive in Africa than in industrialized nations, poverty is one of the biggest barriers. As a result, libraries have a difficult time implementing sustainable practices due to low funding.

According to Sobalaje and Ogunmodede (2015), it is common for organizations, government ministries, and parastatals in Nigeria to reserve a small space, furnish it with rickety, old tables, chairs, and cabinets, and stock it with an odd assortment of books and magazines with the word "library" inscribed on the doorpost. This does not meet the needs of the users of such a facility. An examination of the Nigerian educational system reveals that conventional libraries are either non-existent or in appalling condition at all levels. Due to a lack of financing, libraries in Nigeria are given little attention. Many higher education institutions have manageable buildings and equipment for their libraries, but they lack the books and journals that provide the vital foundation of the library's information.

Management problems: users cannot see electronic materials like they can in traditional libraries, where they are physically available for usage and browsing. Libraries subscribe to several packages from various publishers/vendors and according to Tyonum and Ezeogu (2015) such information sources are dispersed and inconvenient for users to browse and search. In order to access all of these resources with a single keystroke, they must be integrated. Users do not have the time or patience to visit numerous websites or platforms, which prevents them from making full use of the resources available to them for development.

2.3 Theoretical Framework

Implementation can be defined as an intentionally started process where agents intend to execute new practices or change existing practices that are institutionally approved and

are carried out by themselves and other agents (May, 2013). These have the power to alter the social system. People collaborate with other actors, processes, and situations when they try to put into practice a better method of doing things. Implementation is therefore viewed as a dynamic, ongoing process.

The Diffusion of Innovation theory and the Normalisation theory are two associated ideas employed in this study.

Theory Everett Roger created the Diffusion of Innovation Theory in 1960. According to the theory, a new concept spreads due to four factors: invention, communication channels, time, and social structure. Five stages make up the dissemination process: knowledge, persuasion, choice, implementation, and confirmation. The theory is represented as follows in figure 2.3:

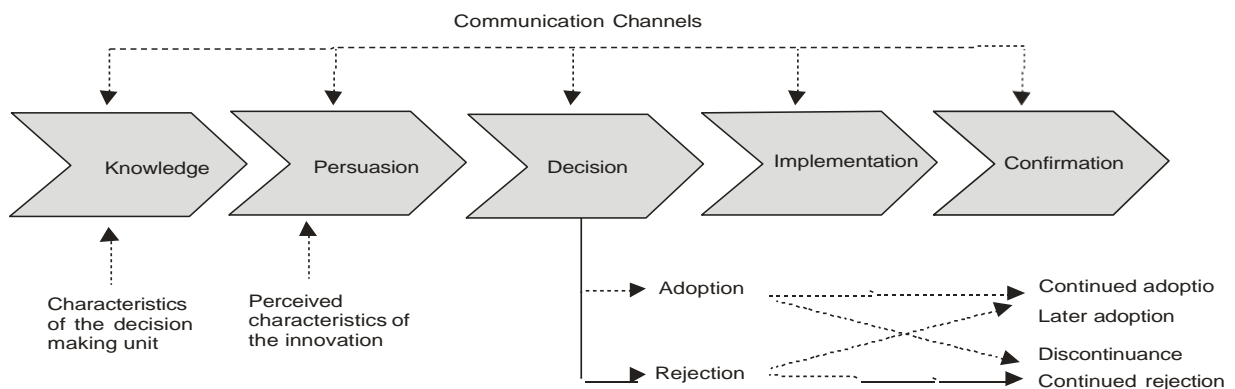


Figure 2.3 Innovation-decision process

The S-shaped adoption curve often known as the epidemic model of adoption, was a concept introduced by the diffusion innovation theory. According to this curve, the population's adoption of a new technique or idea can be seen as following a particular pattern. This analogy suggests that the spread rate is initially slow. The spread rate first quickens in the middle of the graph before slowing down and forming the S-shaped curve shown in Figure below.

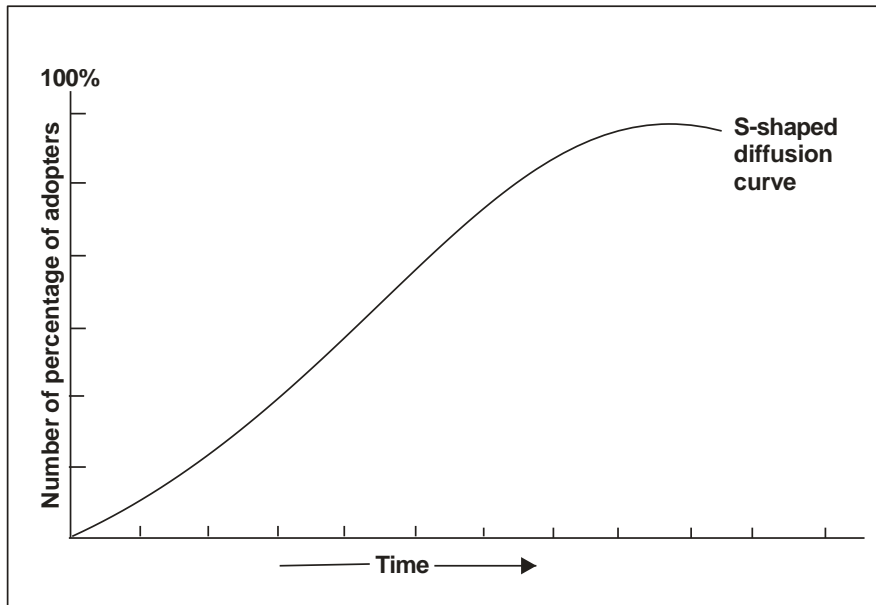


Figure 2.4 S-shaped Adoption Curve (Rogers, 2003)

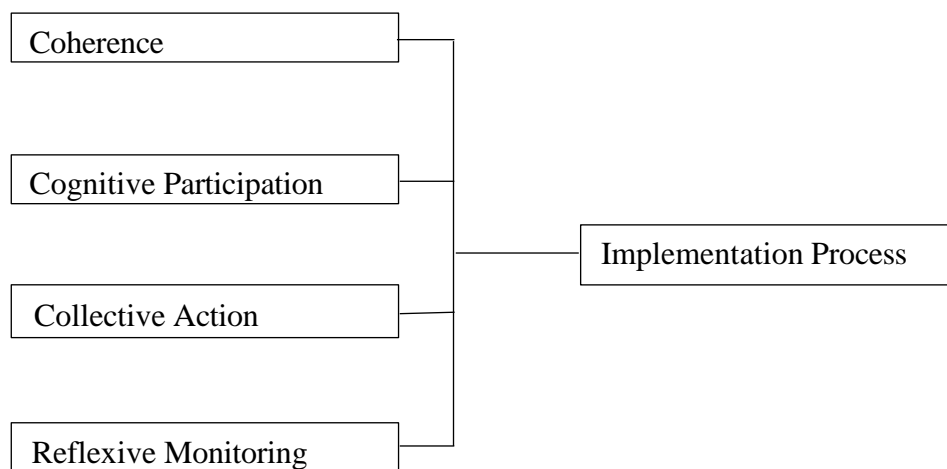
The concept behind the S-shape curve according to Rogers (2003) is that, innovation always originates from beyond the confines of the social system in use at the moment. This implies that fresh ideas are first only presented to a small number of people. As more people begin to adopt the invention, it is exposed to an increasing number of individuals inside the social system. As a result, the spread rate keeps rising. Eventually, the majority of the social system's members embrace the novel concept, and this slow down the rate of spread. When no more members are available to adopt the innovation, the spread comes to an end.

Figure 2.4 S-shaped curve shows that there is a crucial point at which the growth curve's slope turns positive and the number of members who have adopted the invention grows to such an extent that there are scarcely any new members left to adopt it. This stage is reached when roughly 10% to 20% of the social system's participants have embraced the innovation. Most of the most recent developments follow the S-shaped adoption

curve that was previously outlined. Although it is known as Metcalfe's law, its implementation is crucial for the adoption of communication technology.

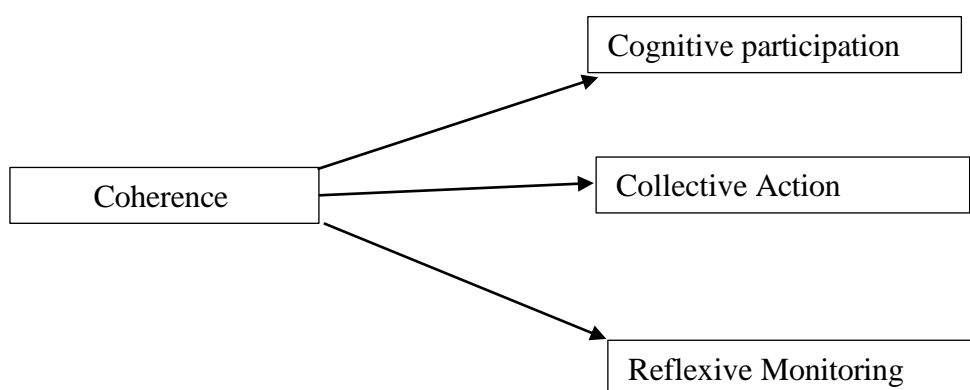
The Normalisation Process Theory (NPT) is an implementation theory that was first conceived in a series of learning workshops with a large number of participants, including Pauline Ong, Tracy Finch, Catherine Pope, Anne Kennedy, Anne Rogers, Carl R. May, and Elizabeth Murray. The theory is a derivative sociological theory of the adoption, embedding, and integration of new organisational innovations, according to Nilssen (2015). It describes the process of implementation, embedding, and integration as one in which individuals consciously start and try to maintain a series of activities that puts it into action.

The agentic contributions that people and organisations make in order to operationalise new or modified modes of practice as they engage with dynamic parts of their environments are the centre of attention in the normalisation process hypothesis. The goal of implementation theory, according to Stiglitz (2015) is the creation of a strong set of conceptual tools that allow researchers and practitioners to recognise, categorise, and explain crucial components of implementation processes and results. Since NPT is an action theory, it focuses on understanding people's actions rather than their attitudes or beliefs, and this action is broken down into four NPT constructs.



Hooker et al (2010)

Figure 2.5 Four core constructs of Implementation constructs



(Hooker *et al.*, 2010)

Figure 2.6 Interactions between NPT mechanisms: obligatory starting point

Below is a description of the four central constructs of the models based on normalization theory:

Coherence or sense-making, cognitive involvement, group activity, reflexive monitoring, and their interactions with one another are factors. Whether these practices involve a novel piece of technology or a sophisticated intervention study, each construct represents various types of work that individuals engage in as they work around a certain set of practices.

When faced with the challenge of operationalising a particular set of practices, people individually and collectively attempt to create coherence. It has four components, just

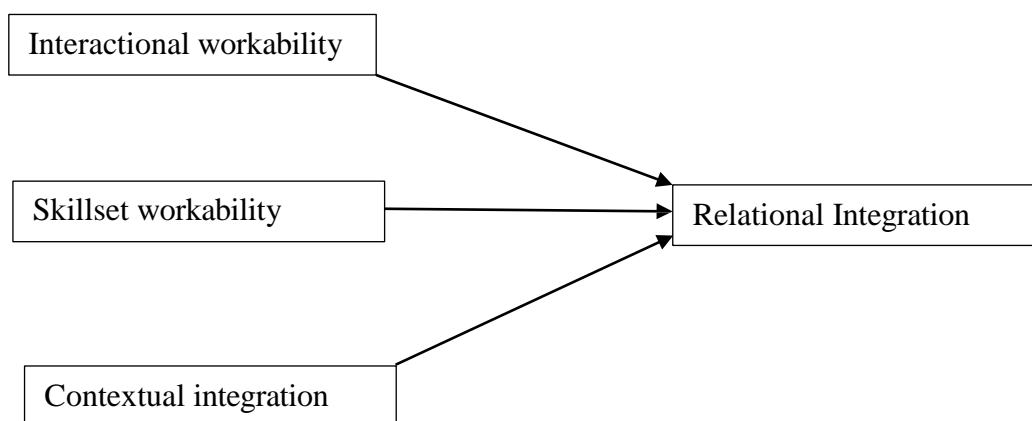
like all NPT structures. They are: Differentiation: understanding the differences between a group of techniques and their objects is crucial to sense-making work. Community-based specification: sense-making depends on individuals coming to a consensus about the purposes, goals, and anticipated advantages of a particular set of behaviours. Person-specific information: making sense also involves the individual. Here, coherence work participants must take actions that will aid in their understanding of the specific duties and responsibilities centred on a set of practices. Internalisation: sense-making involves people in activities that help them comprehend the worth, advantages, and significance of a certain set of behaviours.

Cognitive Participation: building and maintaining a community of practice around a complex intervention or new technology requires people to engage in relational work. It has four components, much as all other NPT constructions. Initiation: when a set of procedures is altered or renewed, one of the main issues is whether or not the important players are striving to advance the procedures. Enrolment: in order to collectively participate to the effort needed in new practices, participants may need to organise or reorganise both themselves and others. Rethinking individual and collective relationships between people and things may be necessary as part of this difficult endeavour. Legitimation: ensuring that other participants feel it is appropriate for them to be included and that they can contribute meaningfully is a crucial part of relational work centred on participation. Activation: once a practice is established, participants must decide together what steps must be taken in order to continue it and remain involved.

Collective action: collective Action is the operational effort that individuals perform to put into effect a set of practices, whether these practices reflect cutting-edge technology or difficult medical interventions. It has four components, much as all other NPT

constructions. These were the first NPT constructs to be defined, and rather than reflecting the nature of the work involved, their titles refer to characteristics of sophisticated interventions or technology. When people try to operationalise a set of practices in regular situations, they engage in interactional work with one another, with artefacts, and with other parts of the practices.

Relational Integration: this is the process of building accountability and sustaining trust in a set of practices as well as in one another among users. Workability of a skill set is the ability to allocate tasks in a way that supports a division of labour that is based on a set of procedures that are operationalised in the actual world. Any set of procedures must include an important aspect of who gets to do the work. Contextual Integration: this is resource management, which involves allocating various types of resources and carrying out protocols, regulations, and procedures.



(Hooker *et al.*, 2010)

Figure 2.7 Interactions between NPM mechanisms

Reflexive Monitoring is the appraisal process which people use to evaluate and comprehend how a new set of activities affect them and those around them. It has four elements, just as all NPT constructs:

Systematisation: People who engage in any set of behaviours may want to know how beneficial and effective it is for them and for others, and this requires the effort of gathering data in a number of ways. Community appraisal: participants collaborate to assess the value of a collection of activities, sometimes in formal collaborative settings and other times in informal groupings.

Individual evaluation: Participants in new practices do experimental individual evaluations of the practices' effects on them and the contexts in which they are embedded. This work inspires people to take activities that reflect their particular perspectives on cutting-edge technologies or sophisticated interventions. Reconfiguration: individual or group appraisal work may result in attempts to redefine processes or adjust practices, and even change the form of a new technology itself.

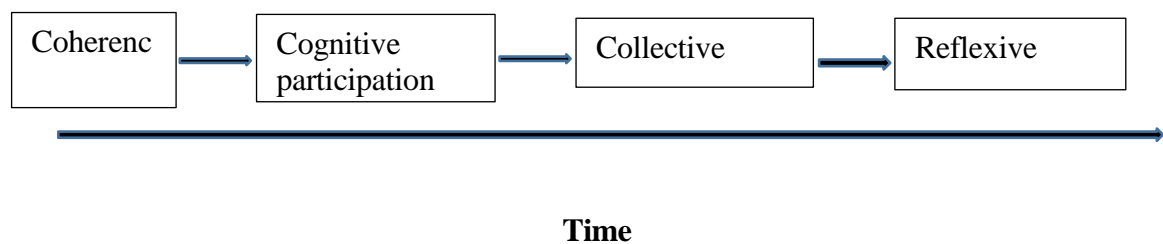


Figure 2.8 Figure depicting interactions of the constructs' sequential operation over time

Framework for the Study - Authors' Concept

From the aforementioned, the Normalisation process model was adopted for this study. This is because the constructs and the moderating variables are appropriate to the implementation process of SDGS in Nigerian public libraries. This study will follow the phases outlined by the theory in introducing a new concept in an environment. The Normalisation process theory has relevance to this study and can be utilized to illustrate

how the public library can influence the implementation process of sustainable development goals following the four normalisation determinants as follow:

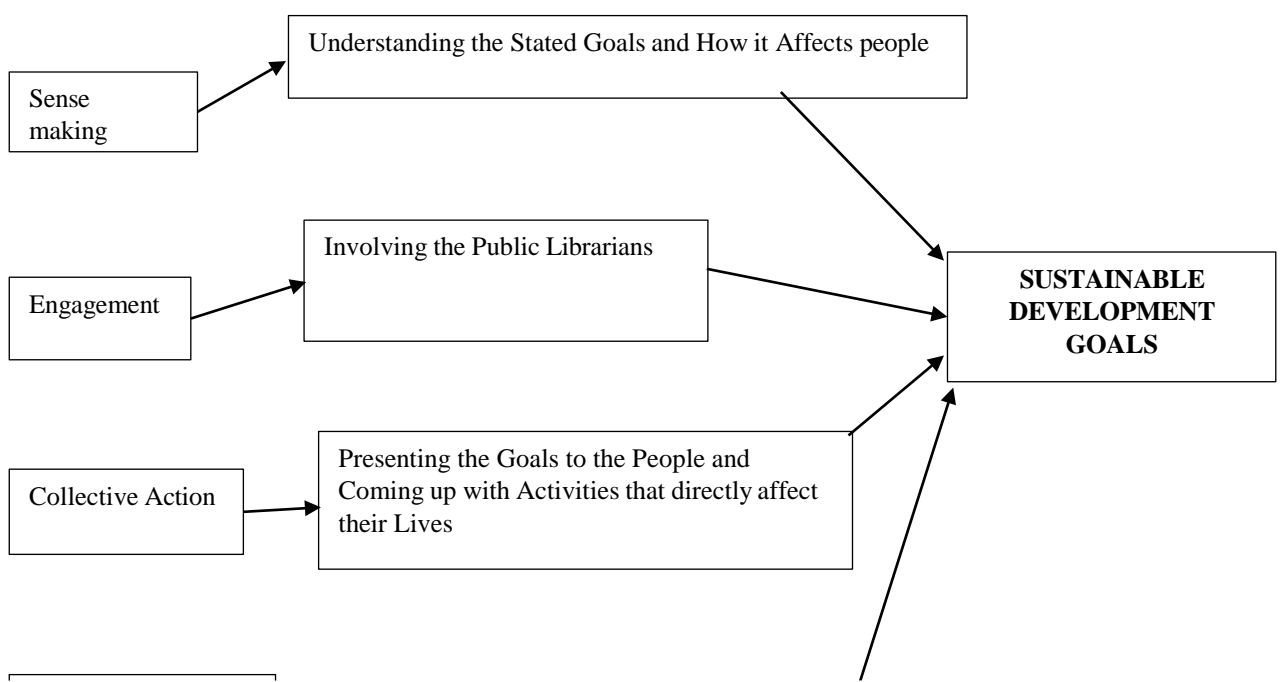
Understanding the stated sustainable development goals and how these goals affect the people (sense making);

Involving the public librarians (Engagement);

Presenting the goals to the people or patrons of the library (collective action); and

Appraisal of the system set in motion (Reflexing Monitoring).

This is further represented in figure 2.10 showing the steps that the public library can follow in helping to implement the sustainable development goals using Normalisation theory.



Author's original concept (2021)

Figure 2.9 Graphical Representation of Theoretical Framework Adoption

2.4 Related Empirical Studies

In another study, Emorjorho (2010) examined 'ICT and collection management in public libraries: A survey of south-south zone of Nigeria'. The aim of the study was to examine the presence of ICT and strength of the collections in public libraries in the south-south zone of Nigeria. The study was descriptive based on an ex-post facto design. The population consisted of all staff and users of the public libraries and a sample of 147 respondents was drawn using random sampling. The instrument used to collect data was the questionnaire. Data was presented in figures and tables and were analysed using statistical percentages. The findings of the study revealed that there were minimal ICT components available in the public libraries and slightly more than half of the libraries were computerized. It was also discovered that very few of the respondents had internet access and electronic resources at their disposal. Furthermore, even though more than half of the librarians had attended trainings on ICT collection management, they still felt more comfortable with the regular collections of books and the traditional way of librarianship. The study has some relationships with this present study as some views can be applied to the use of ICT by public libraries to reach its clientele with the goals of sustainable development goals.

Gama (2013) also studied the application of information and communication technology facilities to Reference and Information Service (RIS) provision in university libraries in North West Zone of Nigeria. The study examined types of RIS provided in university libraries in North Western Zone of Nigeria. The objectives of the research were to find the types of RIS provided, various kinds of ICT facilities used in the provision of the services and the challenges facing effective service delivery with the ICTs. Nine universities located in the geopolitical zone were surveyed through their reference librarians. Questionnaire was the only instrument used to collect data, which were

analyzed using descriptive statistics. Findings revealed that all the libraries studied provided RIS that could be termed as core. They applied variety of ICT facilities such as photocopiers, projectors, Internet and CD-ROM to provide various kinds of RIS. Irregular power supply and inadequate ICT facilities were the major constraints to effective RIS delivery using ICT facilities. The findings further revealed that the common services found among the libraries included answering reference questions, library orientation, referral, photocopy and display of new arrival services. The photocopier was the only facility found commonly used by all the libraries in the provision of RIS. Use of the Internet to provide literature search service to users was also found to be common among most of the libraries. Projectors such as power point, slide, and overhead were also revealed to be used by most of the libraries especially in providing orientation services. The least used facility was found to be chat social network. The study is related to the present research which also looked at how public libraries can utilize ICT and other resources to implement SDGs.

Oyewo (2015) in a study titled 'Public Libraries in Nigeria: resources and services for young adults stated that Public libraries play fundamental roles in the mental and intellectual development of young adults via the provision of resources and services fitted for their information needs. Unfortunately, this cannot be said of public libraries in Nigeria. The situation is not helped by the paucity of scholarship that particularly examines young adults' resource/service satisfaction as a separate category of users in the Nigerian public library system. Hence, this paper critically examines the information needs of young adult patrons of public libraries in Nigeria, with the Oyo State Public Library as a case study. Research questions were formulated, with the questionnaire as the data collection instrument. A total of 110 copies of the questionnaire were distributed, out of which Ninety-two (86.3% of the representative population) were

retrieved. The study revealed dissatisfaction by young adult patrons with the Library's services due to its inadequate infrastructure, collections, and trained library staff. Appropriate recommendations were proffered. Oyewo studied the role of public libraries in providing resources and services for young adults while the present study focused on how the resources and services of the public library can influence the implementation of the sustainable development goals. The studies however have public libraries resources and services as their focal points.

Mamman (2015) investigated the utilisation of ICT in public library services in Nigeria. The main objective was to examine the utilisation of ICT in public library services in Nigeria. Survey research method was applied for the study. The population of the study comprised 36 States public libraries in Nigeria. Library statistics obtained from the libraries showed that there were 13,015 people comprising 12,234 users, 244 librarians and 537 library officers. The sample of the study consisted of 10% of library users (4,007) drawn from 12 public libraries in Nigeria; 74 librarians and 164 library officers. Data was collected through questionnaire and structured interview method. The data was organised in, tables, charts and further analysed using T-test. The findings of the study revealed that computer facilities such as computers, UPS and printers were the most available facilities in public libraries in Nigeria while computer software resources such as online database, Internet connectivity, and application software and storage media were scarcely available. The findings also indicated that staff agreed overwhelmingly that there are benefits in utilising ICTs in our public libraries which ranges from provision of vast amount of information to ability to store large amount of information on either internal or external storage facilities. ICT facilities are used for various purposes ranging from self-development to entertainment while, this study is aimed at enabling public libraries in Nigeria to acquire and apply ICTs in their

operations and services, the present study is on how the public library can utilise ICTs in implementing sustainable development goals.

Mamman's work centred on the utilisation of ICT in Nigerian public libraries while, the present study was on the influence of the public library as a whole on the successful implementation of sustainable development goals. The similarities of both studies is in the fact that both studies were concerned with how ICTs can be used to provide better services in public libraries in Nigeria.

Abel *et al.* (2016) presented a paper on 'Meeting the Sustainable Development Goals Leads to Lower World Population Growth'. The study showed the extent to which the expected world population growth could be lowered by successfully by implementing the recently agreed-upon Sustainable Development Goals (SDGs). The SDGs include specific quantitative targets on mortality, reproductive health, and education for all girls by 2030, measures that will directly and indirectly affect future demographic trends. Based on a multidimensional model of population dynamics that stratify national populations by age, sex, and level of education with educational fertility and mortality differentials, these goals are translated into SDGs population scenarios, resulting in population sizes between 8.2 and 8.7 billion in 2100. Because these results lie outside the 95% prediction range given by the 2015 United Nations probabilistic population projections, the study can be complemented with sensitivity analyses of these projections that suggest that the prediction intervals are too narrow because of uncertainty in baseline data, conservative assumptions on correlations, and the possibility of new policies influencing these trends. Although the analysis presented here rests on several assumptions about the implementation of the SDGs and the persistence of educational, fertility, and mortality differentials, it quantitatively illustrates the view that demography is not destiny and that policies can make a decisive

difference. In particular, advances in female education and reproductive health can contribute greatly to reducing world population growth. The authors were concerned with how meeting sustainable development goals will lower world population while the present study is concerned with how public libraries can help to meet the sustainable development goals in Nigeria.

Adeleke (2017) in a research paper titled, 'An evaluation of ICT services in library as a correlation to sustainable educational development in south-western universities in Nigeria. The study focused on evaluating the impact of ICT in library on teaching-learning processes to find out if there is any improvement in academic performance of students through its integration. A total number of 255 respondents that were library users from five tertiary institutions in south-western Nigeria were used for the study. Data was obtained through questionnaire. The findings of the study revealed that ICT is recognized as jack of all trade that has been implemented in every facet of human life in which education is not left out. It has brought notable educational development and transformation to developed countries and this is motivating the library units in tertiary institutions to shift from conventional library to e-library which is referred to as ICT in library. Adeleke dealt with ICT services as a correlation to sustainable educational development in south western universities, while the present study is concerned with the public libraries in the whole of Nigeria and how their services influence the implementation of SDGs. The two studies were concerned with service delivery in Nigerian public library.

Salman *et al.* (2017) in a paper titled, 'Access to and use of public library services in Nigeria investigated the factors hampering access to and use of public library (urban and rural) services in Nigeria. Both quantitative and qualitative research methods were employed through the administration of a questionnaire to users in both urban and rural

public libraries in Nigeria and conducting interviews with the public librarians. One of the objectives of the study centred on identifying awareness and utilisation of library services, including utilisation patterns. The study also sought to investigate the levels of satisfaction among users as well as make recommendations for improved service delivery. The population was the registered public library user group from which 394 users were randomly sampled from twelve purposively selected libraries - two from each of the six regions. The respondents were mainly educated male user group representing a wide variety of occupations. Awareness of services was restricted to a few services, and accessibility to the major library services was found to be a challenge to many. Utilisation patterns indicated infrequent use of only a few services, and very low satisfaction with what is being offered. Challenges identified included unawareness of services, few copies of materials and lack of information literacy skills. Recommendations included the enhancement of community participation in decision-making concerning services, provision of relevant and enough materials and employment of effective marketing to improve access and promote services among users and potential users. The authors concentrated on the accessibility of public libraries' services while the present study is on how these services can be used in the developmental processes of the communities. Both studies were similar in their study of public libraries services as a whole.

In their study, Ezeani *et al.* (2017) researched on a title, 'Towards sustainable development goals: what role for academic libraries in Nigeria in assuring inclusive access to information for learners with special needs'. The study surveyed the facilities and services available for inclusive and equitable quality education for physically challenged and visually impaired students in Nigeria. The study was guided by five research objectives. The population of the study consisted of physically challenged and

visually impaired students from six Federal Government funded universities in six geopolitical zones of Nigeria. Interviews and focus group discussion were used for data collection. The data collected were analysed qualitatively. The result showed that among the six universities studied only one had a special section for this category of users, although others made efforts towards having such a facility. Though the students indicated that they received various kinds of library services, it was found that these services were not very effectively presented. The challenges identified included lack of assistive technology to aid their access to information, non-availability of lifts to facilitate their movement, especially to floors where ICT facilities and other resources were located. The study highlighted that for inclusive and equitable quality education for people with disability, access to information is important; and since the library plays a key role in providing this access, there is need to develop policies and put structures in place to cater for students with special needs. Based on the findings, the investigators came up with a model for inclusive access to information for students with special needs. Ezeani *et al.* surveyed the facilities and services available for inclusive and equitable quality education for physically challenged and visually impaired students in Nigeria while the present, covered the public library as it dealt with not only the physically challenged but everybody in the community. The similarity between the earlier and the present is that both studies were concerned with involvement of libraries in the achievement of SDGs in Nigeria.

Abiola *et al.* (2017) in a study titled “A survey of the awareness of the 2030 agenda: A case of libraries and librarians in Osun State, Nigeria examined the awareness of libraries and librarians on the importance of attainment of SDGs in Osun State, Nigeria. The study included SDGs that are dedicated to eradicating poverty, promoting gender equality and empowering women, ensuring inclusive and equitable quality education

and promoting lifelong learning opportunities for all as well as developing a global partnership for development, all of which cannot be achieved without equitable access to information and freedom of expression. The population of the study comprised of a hundred library and information personnel from all the local government areas in the state who were randomly selected by convenient sampling. The instruments used to collect data for the study were questionnaire and personal observation. Data were analyzed using descriptive research method. The findings revealed that many library and information personnel were aware of the sustainable development goals but were not conversant with the details and modalities for its attainment. Many of them were not familiar with the main contents of SDGs. None of the libraries examined had any immediate or long-term plans for the attainment of SDGs neither did they have relevant programmes for the awareness of SDGs. It was recommended that libraries should engage in information repackaging, awareness campaign, mobile library and outreach services and capacity building to ensure quality library service for the attainment of SDGs by 2030. Also, government at all levels and non-governmental organisations were advised to provide increased budgetary allocation to support public and state libraries to enhance their effective library and information services. The similarity of Abiola *et al.*'s study and this research is that both studies looked at how the public libraries can influence the achievement of this vision 2030. The difference between the two studies is that Abiola *et al.*, only surveyed the awareness of libraries and librarians on SDGs, while the present study included material and human resources.

Iwhiwhu and Okorodudu (2017) in a paper titled 'Public Library Information Resources, Facilities, and Services: User Satisfaction with the Edo State Central Library, Benin-City, Nigeria' stated that the main purpose of any library is to provide relevant and up-to-date materials with a view to satisfying the information needs of the

users. The descriptive survey research via the ex post facto design was used in this study. Two hundred (200) respondents were selected using the availability sampling technique. Questionnaire and observation were the instruments used for data collection and the data were analysed using descriptive statistics such as percentages, frequencies and mean. Based on their findings, it is clear that the library users were satisfied with some facilities but not with the information resources and services of the Edo state central library. This is as result of the poor state of information resources and inadequate services rendered by the library staff, coupled with their poor attitude to work. The unsatisfactory level of users has serious implications for the library and the users. The poor stocking of information resources and poor-quality services, makes it difficult for librarians to achieve the purpose for establishing the library. The authors' study dealt with user satisfaction of public library information resources, facilities and services in Edo State central library while the present study is concerned with measuring the influence of the human resources and material resources on the implementation of sustainable development goals.

Anasi *et al.* (2018) studied 'University libraries-bridging digital gaps and accelerating the achievement of sustainable development goals through information and communication technologies. The purpose of the study was to examine the functions of university libraries in accelerating the achievement of sustainable development goals (SDGs) through information and communication technologies (ICTs). The study adopted a descriptive survey design using a researcher-developed questionnaire for data collection. In all, 103 professional librarians working in all the university libraries in Ogun State, Nigeria were surveyed. The findings revealed that university libraries in Ogun State, Nigeria are not lagging behind in the provision of ICT facilities for the delivery of twenty-first century library services.

The study highlights the critical role of university libraries in bridging digital gaps by taking advantage of ICTs to accelerate the attainment of SDGS. ICTs have the capacity to accelerate the actualisation of SDGS in all communities. However, illiteracy, lack of political accountability and transparency, lack of financial resources and inadequate power supply were the major challenges impeding the achievement of SDGS in Ogun State, Nigeria. The study established the role of university libraries in bridging digital gaps through ICTs in order to facilitate the attainment of SDGS. The study articulates the roles of university libraries and ICTs in the actualisation of SDGs. But this study is looking at how ICT can be used by the public library to help implement sustainable development goals. Anasi emphasised on the role of university libraries in accelerating the achievement of SDGS while the present study was on the role of public libraries in accelerating the achievement of SDGS. The similarity between the earlier study and the present study is that both studies were on the actualisation of SDGS in Nigeria.

Benson *et al.* (2018) in a paper titled, sustainable development goals (SDGs): taking the public and community library services beyond the library walls examined the framework of Sustainable Development Goals (SDGs) which has opened new development agenda for the global world. In realizing the SDGs, various sectors of the world economy have to make their inputs to ensure optimal actualisation of the goals. The rationale behind the SDGs, understanding the content and contexts of the SDGs, analysis of the library-related SDGs, the place of the public and community libraries in actualization of the SDGs were well articulated.

Benson *et al.* (2018)'s paper argued that public and community library services should move beyond the physical library walls to provide SDG-related services such as: partnering with media houses to ensure optimal dissemination of timely information to

rural dwellers as means of creating awareness on SDGs, collaborating with medical practitioners and Ministry of Health to provide rural dwellers with health information, partnering with non-governmental organisations (NGOs) in providing integrated technical and vocational training programs, partnering with stakeholders in the educational sector to provide functional literacy programmes as means of eradicating illiteracy, provision of environmental information services to the rural dwellers, providing economic information and employment related information services. The strategies to be adopted, to effectively perform the identified functions were also highlighted. Benson *et al*'s study centred on examining the framework used by public and community libraries to bring the sustainable development goals close to the people, while this present study is concerned with measuring the influence of the public libraries on the implementation process of the sustainable development goals.

Ejechi (2018) in a paper titled, 'awareness and perception of sustainable development goals (SDGs) among library personnel in Edo State University library', was guided by three research objectives. The population of the study consisted of 132 professional and non-professional library personnel from the John Harris library, University of Benin, Benson Idahosa University library and Ambrose Ali University library. The sampling technique used was the total enumeration technique. A structured questionnaire was used to gather data and the results showed that most of the respondents were aware of the existence of SDGs. There was also a positive perception of the library personnel towards SDGs with most of the respondents agreeing that the SDGs can enhance human development. Based on the data collected and analysed for the study, the following are the major findings. The study showed that there is a high level of awareness about sustainable development goals among library personnel in Edo State. The results strongly prove that the medium of this awareness was social media that is, social media

was an effective tool that contributed to the awareness level of library personnel in Edo state. The majority of the library personnel in Edo State have a perception that the SDGs enhance human development and is required by library professional.

The study however, revealed a high perception towards the achievable time frame of the SDGs as many believed that it was not achievable within the time frame of 15 years. Also revealed in the result is the perception that the SDGs are another means of embezzlement of government funds. Poor publicity of the SDGs and high level of corruption/misappropriation of fund was revealed to be one of the challenges facing library personnel in Edo state as regards to the SDGs actualisation. Closely related to the above, is the believe also that negligence of the library profession by government and the poor lobbying and advocacy skills of the library personnel were also limiting factors to the achievement of the SDGs. The study by Ejechi investigated the level of awareness and perception of SDGs among library personnel in Edo State University library while, the present study not only looked at the awareness and perception of librarians of the SDGs but also the influence of other factors assisting public libraries in making the SDGs a reality.

Fischer (2018) in a survey titled, 'Human resource challenges for public libraries, presented the major findings from a survey on human resource management in public libraries. The survey was conducted via the Internet. The participants were librarians with human resource management experience employed by public libraries in the United States. The majority of the participants responded that human resource management was challenging to some degree. The result showed that majority of the respondents were able to solve their human resource problems successfully. Majority of them also believed that the human resource curriculum for library science programmes was inadequate. The goal of this research was to study all functions of human resource

management which include: recruiting, hiring, training, development, performance appraisal, compensation and benefits, and employee law.

The research examined whether certain functions of human resource management were more challenging than other functions and sought to elicit from the respondents' common solutions to human resource problems. The survey for this study on human resource challenges for public libraries targeted management-level librarians who have had prior experience with human resource management in a public library. The respondents were not required to have a master's degree in library science. In order to recruit librarians with public library management experience to respond to the survey, this researcher posted a message to e-mail discussion groups and online message boards. She e-mailed national and state library associations to ask if someone would send an e-mail to their discussion groups without the researcher being a current member. The survey was created as an online survey using the Survey Gizmo website. The survey consisted of multiple-choice, Likert rating scales, and qualitative questions. The questions collected demographic information related to the respondents' jobs and human resource-related role, as well as library statistics. The questions about human resource management focused on rating how challenging human resource functions have been for the library. The results of the survey did not depict a clear correlation between budget, size of population, and a librarian's personal feelings about human resource challenges despite the fact that the surveys mentioned (discussed in the literature review) found a correlation among variables. Fisher studied the challenges of human resources in public libraries while the present studied how human resources and material resources of the public library can be used as instruments in implementing SDGs.

Chewe and Imasiku (2018) in a paper titled, 'Centrality of libraries in the actualisation of sustainable development goals in Zambia investigated the centrality of libraries in the actualisation of the SDGs in Zambia by 2030. A survey design was adopted for the study. Purposive sampling was used to select 30 respondents from six libraries within Lusaka, Zambia. The study found no evidence of specific programming for SDGs by the surveyed libraries. The paper posited that without the input from libraries it will be difficult for Zambia to achieve the SDGs. The study therefore proffered recommendations on how libraries can be more proactive in initiating and implementing programmes that would enhance their visibility in the realisation of UN agenda by 2030. The findings of the study informed policy and practice direction on how best to leverage libraries in the actualisation of SDGs. The study concluded that libraries are critical in the full actualisation of SDGs in Zambia. The authors examined the centrality of libraries in the actualisation of SDGs in Zambia, while the present study is concerned with the influence of Nigerian public libraries on the actualisation of SDGs. Both studies looked at how libraries can be effectively used in the actualisation of SDGs.

In yet another study titled, 'sustainable development goals (SDGs) a sine qua-non for improved services in public libraries in Nigeria: challenges and prospects', Okoye *et al.* (2019) looked into the sustainable development goals (SDGs) as a sine qua-non for improved services in public library in Nigeria: challenges and prospects. Questionnaire was used for data collection. Out of ninety copies of questionnaire distributed to all the library staff at Imo state public library, seventy-two were used for the study and eight copies were discarded for various reasons. Frequency and percentages were used to analyse research question one while mean and standard deviation were used to analyse other research questions. Regression was also used to test the null hypothesis formulated at 0.05 levels of significance. The result depicted a very strong relationship

between strategies utilised and the challenges faced by the library as it showed 86.1% level of coefficient between the two. Based on this, the null hypothesis which states that the challenges faced by the library does not significantly affect the strategies utilized in the library to achieve SDGs was rejected. Moreover, from the result, it was discovered that 90% of the staff said that they have heard of SDGs before but only seven (10%) said that it has been achieved in their libraries. The study stated that reasons for the non-attainment of SDGs are: lack of government support, lack of capacity building for staff, inadequate Internet connectivity, lack of awareness on the services of the public library etc. The creation of massive campaign at various places in the town, full government support, provision of adequate funds and acquisition of all necessary facilities with full internet connectivity have been identified as solutions for the actualization of the SDGs. The studies have a lot in common as they both highlighted the prospects and challenges of public libraries in implanting the SDGs. However, the earlier study dwelt on Imo State public libraries while the present stud covered all Nigerian public libraries, putting their material resources and human resources into consideration.

2.5 Summary of the Literature Review

The literature reviewed for this study focused on the following sub topics: concept of public libraries, public access and public libraries, libraries and the sustainable development goals, the concept of information and communication technology, public access and information and communication technology, problems militating against the performance of libraries as an educational tool for sustainable development goals, theoretical framework, review of related empirical studies.

Constructs from the normalisation theory were analysed and a study framework was developed from it. A framework for the implementation of new ideas was adopted to

help show the steps through which new ideas can be introduced into an existing system. The moderating variables include, 'time', 'knowledge' and 'government intervention'.

Empirical review of related existing studies on SDGS and public libraries was observed in order to identify the gaps in the studies.

Globally, many researches have focused on the services of Public Libraries and their resources. Some studies that investigated Public Libraries and SDGS did not focus on creating a working synergy between them and did not study the strength of the Nigerian Public Library to measure if they could be used as implementation tools. A peruse of the existing literature on the Influence of Public Libraries on the implementation of SDGS in Nigeria indicated that Public Libraries were accurate tools for use in the implementation of SDGS. However, their potentials have not been maximised in Nigeria. Other research studies on public Libraries and SDGS used mostly quantitative research methods; whereas, this study used a mixture of both quantitative and qualitative research methods

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a mixed method approach involving explanatory sequential strategy where elements of qualitative and quantitative researches are combined to answer the research questions. The quantitative data collection and analysis was done followed by the qualitative data collection and analysis. George (2021) explained that a mixed methods research can give the research a clearer picture as it combines the benefits of both qualitative and quantitative methods.

3.2 Population of the Study

The population is made up of 1,776 library staff which included certified librarians, library officers and library assistants from the 37 public library headquarters and their annexes in each of the state capitals, including Federal Capital Territory, Abuja. The population of the study is shown in Table 3.1. (See Appendix A; Page 145)

The population of users of public libraries in Nigeria, is unknown. It could not be ascertained how many people visit the public libraries in Nigeria because most public libraries do not have current working registers for their users.

3.3 Sample and Sampling Technique

Purposive sampling procedure was used to select 6 states, one each from the 6 geopolitical zones of Nigeria. These are states whose public libraries have some form of information technology components in them. These states are, Nasarawa (North Central); Adamawa (North East); Kaduna (North West); Enugu (South East); Cross river (South South); and Lagos (South West).

3.3.1 Sampling of Library Users

The public library is a library that is open to all and sundry and from preliminary studies, it was noted that most public libraries in Nigeria do not have current record of their active users. As such, the population of public library users was undeterminable. Therefore, the sample size for users was gotten from a formula of getting a sample size from an unknown population as stated by Smith (2018): (See Appendix I; Page 173)

$$(Z\text{-score})^2 * \text{standard Deviation} * (1 - \text{standard Deviation}) / (\text{Margin of error})^2$$

$$(1.96)^2 * .5(.5) / (.05)^2$$

$$(3.8416 * .25) / .0025$$

$$384.16$$

$$= 384 \text{ users}$$

Stratified disproportionate sampling procedure was used to equally divide 384 users between the 6 selected states. Each state had 64 users.

3.3.2 Sampling of Library Staff

According to Librarians' Registration Council of Nigeria, LRCN (2018), the total number of library staff in the six selected states is 169. Purposive sampling procedure was used to select only public library headquarters in each of the selected states; this is because any developmental idea stems from the headquarters and spreads to other branches.

Table 3.2 presents the total sample of library staff for the study.

Table 3.2: Total Sample of Library Staff

S/N	Name of Library	No of Certified Librarians	No of Library Officers (LO)	No of Library Assistants (LA)	
1	Adamawa State Library Board, Yola	17	17	5	
2	Cross River State Library Board, Calabar	5	6	20	
3	Enugu State Library Board, Enugu	8	1	16	
4	Kaduna State Library Board, Kaduna	5	9	22	
5	Lagos State Library Board, Lagos	10	3	-	
6	Nassarawa State Library Board, Lafia	2	19	4	
	Total	47	55	67	169

Source: LRCN Report (2018)

3.3.3 Sampling of SDG Staff

The sustainable development programme officers that were interviewed were selected based on purposive sampling (typical case sampling) procedure. According to Nikolopoulou (2022), participants of a typical case sampling are in most cases based on their possibility of behaving like everyone else sharing the same attributes or experiences. As such, Niger state, Lagos state and Adamawa State programme officers for sustainable development goals were interviewed to obtain data for the qualitative analysis.

3.4 Instruments for Data Collection

To collect data for the study, which is focused on respondents' opinions, the researcher used questionnaire, interview schedule, observation checklist and a sensitization workshop as instruments of data collection covering the seven objectives of the study.

Two types of questionnaire were developed, titled 'Questionnaire on Influence of Public Library on the Implementation of SDGs' (QIPLISDG). One questionnaire for the public library staff (See Appendix C; Page 150) and the other for users of public library (See Appendix F; Page 158). And these were used to gather information for research questions 1, 2, 3 and 7. The questionnaire adopted modified four point Likert scale of scoring the variables thus: Strongly Agree (SA)-4points; Agree (A)-3points; Disagree (D)-2points; Strongly Disagree (SD)-1point, Extremely Aware- 4points; Moderately Aware-3points; Slightly Aware-2points; Not at all Aware-1point, Very High-4points; High-3points, Low-2points, Very Low -1point. Observation checklist (See Appendix E; Page 157) was used to answer research question 5. Interview schedule (See Appendix D; Page 156) was used to gather information for research questions 4. While, to answer research question 6, a sensitisation workshop was conducted to practicalise how the public library can be used to enhance the implementation process of SDGS (See Appendix G, Page 161). Participants of the workshop were undergraduates from FUT, Minna, and students from college of education, Minna.

3.5 Validity of the Instruments

The questionnaire, interview schedule, observation checklist, and questionnaire for practical sensitisation workshop for this research were subjected to face and content validation by two experts in Department of Library Information Science, three experts in measurement and evaluation and the researcher's supervisors. Copies of the purpose

of the study and research questions as well as hypotheses were attached to the instruments to facilitate their validation. Their corrections, suggestions and modifications were incorporated into the final copy of the research instruments.

3.6 Reliability of the Instruments

To ensure that the instruments were internally consistent and reliable, a pilot study was carried out using 30 respondents made of certified librarians and Users of the Education Resource Centre City library, Abuja. This public library was chosen because it is not part of the actual population of the study. Scores obtained from the pilot study were analysed using Cronbach Alpha method in order to determine consistency of the instrument. The internal consistency reliability estimates for the three (3) clusters were as follow: Cluster A: 0.79, Cluster B: 0.85; Cluster C: 0.63; Cluster E: 0.85. On the whole, the instrument showed an overall correlation of 0.81, which indicated that the instrument was reliable and could be adopted for the study. (See appendix B; Page 147)

3.7 Administration of the Instruments

The researcher administered the questionnaire during working/library hours personally and through the help of one research assistant in each public library covered by the study. The interview was done by the researcher and two research assistants. The practical was conducted by the researcher in conjunction with the public library and the SDGS office.

3.8 Method of Data Analysis

The data from the field were analysed with the use of simple statistical tools like: frequency tables, mean measurement and percentages. Chi-square was used to test the

three hypotheses at 0.05 level of significance using Statistical Package for Social Science (SPSS) computer package, version 20.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Questionnaire Response Rate

Two types of questionnaire were distributed for this study; a users' questionnaire and the library staff questionnaire. A total of Five hundred and fifty-four (554) library staff and users' questionnaire were administered to six public libraries in the six states selected from the six geo-political zones in Nigeria under study. The questionnaire return rate is presented in Tables 4.1a and 4.1b.

Table 4.1 presents the response rate of Public Library users.

Table 4.1: Response Rate (Users)

State	Total administered (F)	Total retrieved (F)	Percentage retrieved (%)
Cross-river	64	57	15
Nassarawa	64	54	14
Enugu	64	43	11
Lagos	64	41	11
Kaduna	64	45	12
Adamawa	64	34	09
Total	384	274	72%

Table 4.1 shows the response rate of public Library Users for the six selected states. Out of 348 questionnaire administered, 274 (72%) were retrieved.

Table 4.2 presents response rate of Public Librarians

Table 4.2: Response Rate (Librarians)

State	Total administered (F)	Total retrieved (F)	Percentage Retrieved (%)
Cross-river	31	20	12
Nasarawa	25	25	15
Enugu	25	17	10
Lagos	13	07	04
Kaduna	36	22	13
Adamawa	39	19	11
Total	169	110	65

Table 4.1b shows the response rate of library staff from the six selected states. Out of 169 questionnaire administered, 110 (65%) were retrieved.

4.2 Demographic Information

The demographic information of users is presented in Table 4.3 to Table 4.4

Table 4.3: Age distribution of user respondents

Respondents age (years)			
		Frequency	Percent
Valid	16-20	76	27.7
	21-25	69	25.2
	26-30	43	15.7
	31-35	35	12.8
	36-40	21	7.7
	above 40	30	10.9
	Total	274	100.0

Table 4.3 shows that 76 (27.7%) of the users were between the ages of 16-20 years, 69 (25.2%) were between the ages of 21-25, 43 (15.7%) were between the ages 26-30. For 31-35 years, there were 35 (12.8%) respondents, 21 (7.7%) were between 36-40 and 30 (10.9%) were above 40 years of age. The Table reveals that majority of the respondents were within the age range of 16-20 years connoting that majority of public library users were much younger people who went there to read for their entry examination or recreation purposes.

Table 4.4 presents the distribution by occupation of public library users.

Table 4.4: Distribution by Occupation (Users)

Occupation	Frequency	Percent
Student	173	63.1
Civil Service	42	15.3
Business	44	16.1
Unemployed	15	5.5
Total	274	100.0

Table 4.4 shows that majority, one hundred and seventy-three, 173 (63.1%) of the user respondents were students, 42 (15.3%) of the respondents were civil servants, 44 (16.1%) were business owners, while, 15(5.5%) of the respondents were unemployed. The Table shows that majority of the respondents were students. This is because most of the public library users were students who possibly went there to look for a quiet environment to study for examinations.

Table 4.5 presents the distribution by age of Public Librarians.

Table 4.5: Distribution by Age (Librarians)

	Frequency	Percent (%)
25years	6	5.5
26-30	22	20.0
31-35	10	9.1
36-40	38	34.5
Above 40	34	30.9
Total	110	100.0

Table 4.5 shows that age range 36-40 which is 34.5% of the respondents were more, while, age 25 years (5.5%) had the least number of librarians.

Table 4.6 presents the distribution by gender of Public Librarians.

Table 4.6: Distribution by Gender (Librarians)

Gender	Frequency	Percent (%)
Male	42	38.2
Female	68	61.8
Total	110	100.0

Table 4.6 reveals that 42 (38.2%) of the librarians were male, while, 68 (61.8%) were female. This indicates that most of the respondents in this population were females.

Table 4.7 presents the distribution by years of service of Public Librarians.

Table 4.7: Distribution by Years of Service (Librarians)

	Frequency	Percent (%)
Below 5	28	25.5
5-10	10	9.1
11-15	23	20.9
16-20	11	10
above 20	38	34.5
Total	110	100.0

Table 4.7 reveals that 28 (25.5%) of the respondents have worked below 5 years. Ten,10 (9.1%) respondents have worked for between 5-10 years; 23 (20.9%) librarians have worked for between 11-15; while, 11 (10%) have worked for 16-20 years; 38 (34.5%) have worked for above 20 years. This indicates that the highest number of respondents in this population have worked above 20 years.

4.3 Answers to the Research Questions

4.3.1 Research question one: What is the level of awareness of sustainable development goals in public libraries in Nigeria?

Table 4.8 presents data on the level of awareness of SDGs in Public Libraries in Nigeria.

Table 4.8: Level of awareness of Library Staff of sustainable development goals.

S/N	Statements	Extremely Aware F (%)	Moderately Aware F (%)	Slightly Aware F (%)	Not at all Aware F (%)	Total F (%)	Mean	SD	Decision Mean >= 2.5
1	Awareness of Sustainable development goals (SDGs)	28(25.5)	50(45.5)	14(12.7)	18(16.4)	110(100)	2.80	1.33	High
2	Programs that have to do with SDGs	30(27.3)	20(18.2)	16(14.5)	44(40)	110 (100)	2.33	1.44	Low
3	Training on how best to communicate about SDGs to our users	18(16.4)	30(27.3)	14(12.7)	48(43.6)	110 (100)	2.16	2.64	Low
4	Programs to end hunger and achieve food security	20(18.2)	20(18.2)	4(3.6)	66(60)	110 (100)	1.95	2.00	Low
5	Programs to help in providing quality education for the people	26(23.6)	18(16.4)	38(34.5)	28(25.5)	110 (100)	2.35	1.10	Low
6	Programs to ensure sustainable management of water and sanitation for all	26(23.6)	30(27.3)	18(16.4)	36(32.7)	110(100)	2.39	1.31	Low
7	Banners and fliers in the library on the SDGs	18(16.4)	34(30.9)	20(18.2)	38(34.5)	110(100)	2.25	1.32	Low
8	Organized programme in relation with development of its community	24(21.2)	24(21.2)	36(32.7)	26(23.6)	110(100)	2.42	1.13	Low

Table 4.8 shows that seven out of the eight statements listed to find out the level of awareness of public library staff on sustainable Development Goals have low mean scores below 2.5 benchmark of the adopted four Points likert scale. These statements include, programmes that have to do with SDGs ($x=2.32$); programmes to end poverty in all its forms everywhere ($x=2.16$); programmes to end hunger and achieve food security ($x = 1.49$); programmes to help in providing quality education for the people ($x = 2.35$); programmes to ensure suitable management of water and sanitation for all ($x=2.39$); banners and flyers in the library on SDGs ($x=2.25$) and organised programmes in relation to the development of the community ($x=2.41$). Awareness of SDGs had a high mean value of 2.80 higher than the decision mean (2.50) indicating that there is a high awareness of SDGs among public librarians. Although, the statement of awareness of SDGs among Public Libraries in Nigeria was high, it is obvious that their knowledge of SDGs does not translate into their involvement in the implementation process. Furthermore, their awareness could largely be based on having heard about the SDGs in passing.

4.3.2 Research question two: What are the qualities of the available human resources such as qualification of library staff, attendance of developmental programmes and social media usage in the public library that can enhance the achievement of sustainable development goals?

Table 4.9 presents data on the qualities of available human resources in Public libraries in terms of qualification.

Table 4.9 Qualification of public library staff

Items/States	Nasarawa F(%)	Lagos F(%)	Adamawa F(%)	Cross River F(%)	Kaduna F(%)	Enugu F(%)	Total F(%)
Staff with a degree and above in LIS	8(7.27)	3(2.73)	4(3.64)	6(5.45)	8(7.27)	6(5.45)	35(31.82)
Staff with a Diploma and other qualifications in LIS	17(15.45)	4(3.64)	15(13.64)	14(12.73)	14(12.73)	11(10.00)	75 (68.18)
Total	25	7	19	20	22	17	110

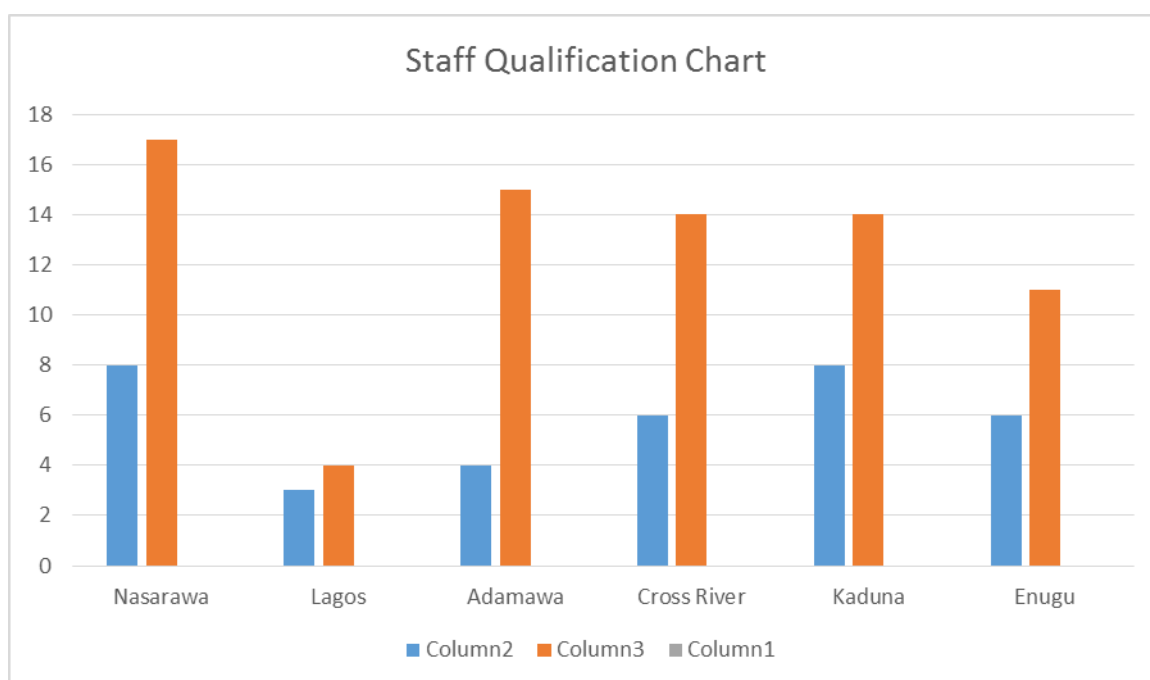


Figure 4.1 Distribution of qualification of public library staff

Table 4.9 reveals the presence of staff in each of the selected public libraries. Staff with degree and above qualification were 35 (31.82%), while, staff with diploma and other qualifications were 75(68.18%), signifying available staff strength in the public libraries to carry out any designed programme. This information is further represented in Figure 4.1.

Table 4.10 presents data on the qualities of available human resources in Public Libraries in terms of attendance of developmental programmes by Public Library Staff.

Table 4.10 Attendance of developmental programmes by public Library staff

Items	Yearly F(%)	Once in 2years F(%)	Once in 3years F(%)	Never F(%)	Total F(%)	Mean	SD	Decision ≥ 2.5
How often do you attend conferences	16(14.5)	22(20.0)	52(47.3)	20(18.2)	110(100)	2.30	2.00	Low
How often do you attend Seminars	10(9.1)	30(27.3)	58(52.7)	12(10.9)	110(100)	2.35	1.35	Low

How often do you attend workshops	8(7.3)	40(36.4)	54(49.1)	8(7.3)	110(100)	2.45	0.93	Low
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Table 4.10 shows that all three statements to find out the frequency of public library staff in the attendance of conferences, seminars and workshops have a mean score below 2.5 benchmark. These statements include, attendance of conferences ($x=2.30$); attendance of seminars ($x=2.35$); and attendance of workshops ($x=2.45$). These show that there is a low rate of attendance of programmes by the public library staff.

Table 4.11 presents data on the qualities of available human resources in Public Libraries in terms of social media usage.

Table 4.11 Social media usage of public library staff

Items	Always F(%)	Sometimes F(%)	Rarely F(%)	Not at all F(%)	Total F(%)	Mean	SD	Decision ≥ 2.5
How active are you on Facebook	20(18.2)	40(36.4)	38(34.5)	12(10.9)	110(100)	2.62	1.14	High
How active are you on Instagram	4 (3.6)	40(36.4)	50(45.5)	16(14.5)	110(100)	2.29	1.31	Low
How active are you on LinkedIn	8(7.3)	38(34.5)	36(32.7)	28(25.5)	110(100)	2.24	2.00	Low
How active are you on Whatsapp	30(27.3)	46(41.8)	20(18.2)	14(12.7)	110(100)	2.84	0.67	High

Table 4.11 reveals the frequency of library staff on social media sites. Two statements that measure the rates of activities on Facebook and Whatsapp sites scored high above the benchmark mean of 2.5, with mean scores of $x=2.62$ and $x=2.84$ respectively. While, activities on Instagram and LinkedIn scored low below the benchmark mean with mean scores of $x=2.29$ and $x=2.24$ respectively.

4.3.3 Research question three: What is the influence of public libraries on the overall development of its users?

Table 4.12 presents data on the influence of Public Libraries on the overall development of its users.

Table 4.12: Influence of public libraries on the overall development of their users

S/N	Items	Strongly Agreed F(%)	Agreed F(%)	Disagreed F(%)	Strongly Disagreed F(%)	Total	Mean	SD	Decision mean ≥ 2.5
1	I am a constant library user	105 (38.3)	130 (47.4)	32(11.7)	17(2.6)	274(100)	3.22	1.32	Agreed
2	I get up to date information from the public library	78 (28.5)	131 (47.8)	54(19.7)	11(4.0)	274	3.01	1.95	Agreed
3	I get information that helps me with my business or work or school	100 (36.5)	134 (48.9)	30(10.9)	10(3.6)	274	3.19	1.06	Agreed
4	I have attended organized programmes in the library on development before	48 (17.5)	55 (20.1)	129 (47.1)	42(15.3)	274	2.39	1.98	Disagreed
5	The library has information materials that can help improve people's livelihood	124 (45.3)	128 (46.7)	124 (45.3)	128 (46.7)	274	3.34	1.35	Agreed
6	The library has information materials on sanitation and better access to portable water	71 (25.9)	148(54.0)	46(16.8)	9(3.3)	274	3.03	1.13	Agreed
7	The library has information materials to promote equitable education and promote lifelong learning opportunities	109 (39.8)	145 (52.9)	16(5.8)	4(1.5)	274	3.31	1.33	Agreed
8	I get adequate information on empowerment from the library	76 (27.7)	129 (47.1)	52(19.0)	17(6.2)	274	3.04	1.46	Agreed

Table 4.12 shows the response of public library users on the influence of public libraries on their overall development seven out of eight statements on the table reveal that there is a high level of impact of public libraries on users. This statement include, I am a constant user of the library (x=3.22); I get up-to-date information from the Public Library (x=3.00); I get information that helps me with business or work or school (x=3.18); the library has information materials that can help improve people's livelihood (x =3.34); the library has information materials on sanitation and better access to potable water (x =3.03); the library has information materials to promote lifelong opportunities lifelong learning opportunities (x= 3.31); and I get adequate information on empowerment from the library (x=3.04). While, one statement scored below the decision made of 2.5 which is, I have attended organised programmes in the library on development before(x=2.39). From the responses, public library users agree that the public library is of immense use to their, in the area of getting information to improve their livelihoods. But, it can also be noted that they have not attended any developmental programmes organised by and in the public libraries.

4.3.4 Research question four: What are the available material resources in public libraries that can enhance the implementation of sustainable development goals?

4.3.5 Table 4.13 presents data on the available material resources in Public Libraries

Table 4.13 Analysis of observation checklist

MATERIALS	LAGOS			NASSARAWA			KADUNA			CRS/RIVER			ADAMAWA			ENUGU		
	A	NA	N	A	NA	N	A	NA	N	A	NA	N	A	NA	N	A	NA	N
A. Materials on SDGs																		
Fliers on SDGs	√		10		√			√			√			√			√	
Books on SDGs	√				√			√			√			√			√	
Journals on SDGs		√			√			√			√			√			√	
Posters on Issues of Development		√			√			√			√			√			√	
Documentaries development issues		√			√		√	√			√			√			√	
Stand by generator	√		1	√		1		√			√			√			√	
Power supply	√		1	√		1			1	√								
Vehicles for transportation	√			√		1	√	√			√	1	√		1	√		1
Mobile libraries		√		√				√			√			√			√	
B. Computer Facilities							√				√			√			√	
Computers	√		30	√		20 0+	√		3 0	√		20	√		10	√		
Scanners	√		1	√		1		√			√		√		5	√		
Printers	√		2	√		10			1	√		2	√		1	√		
UPS	√		20	√		1			1	√								
CD-ROM	√		1	√		10 +		√	1 0	√				√			√	
Internet connection	√			√		1		√			√			√			√	
C. Audio visual/media equipment		√						√			√						√	
Satellite connection		√			√		√	√			√			√			√	
Projectors	√		2	√	√			√			√			√			√	
Television Radio	√		2			2					√			√			√	
Digital cameras					√				2		√			√			√	
Audio tapes		√			√			√			√			√			√	
		√			√			√			√			√			√	

Key: A=Available; NA=Not Available; N: Number

Table 4.13 shows the available material resources in the public libraries that can enhance the implementation of SDGS. The observation checklist was divided into three sections; Section A- materials on SDGS; B- computer Facilities and C- Audiovisual/Media.

It can be noted that except for Lagos State, that indicated the presence of fliers on SDGS, other states under study (Nasarawa, Kaduna, Cross River, Adamawa and Enugu) did not have book materials on SDGs. Furthermore, all the public libraries did not have books and journals on SDGS. The libraries did not have posters and documentaries on issues of development. All the libraries had general power supply; but for standby generator, only Lagos and Nasarawa states had it in working condition. The other states had inactive standby generators. Only Nasarawa state had vehicles for transportation of library material resources and also had a mobile library.

4.3.5 Research question five: What are the possible ways through which library resources can be utilized to enhance the implementation of SDGS in Nigeria?

A sensitisation workshop was organised to answer research question five during the Sustainable Development Goals Sensitisation Workshop which took place on 4th of September, 2021 in Niger State Public Library complex. Questionnaire was used to collect information and feedback about the workshop processes. (See Appendix G)

The workshop was organised as an initiative of Library and Information Technology Department in conjunction with NLA, Minna Chapter, SDG Office and the Niger State Public Library.

Sustainable Development Goals Questionnaire A (SDGQA)

On commencement of the workshop training, Sustainable Development Goals Questionnaire A (SDGQA) was administered on all attendees. The aim was to collect basic information that will aid the collation of demographic statistics and contact details of the attendees, as well as obtain primitive knowledge of the attendees on the workshop before commencement as shown in sections A and B. The analysis of the information gathered include the following;

Section A

4.3.5.1 Demographic Information of Workshop Attendees

Table 4.14 presents data on gender distribution of participants.

Table 4.14: Gender distribution of participants

	Frequency	Percentage
Male	25	57
Female	19	43
Total	44	100

Table 4.14 reveals the total number of the respondents. It was observed that 25(57%) were male while the remaining 19 (43%) were female.

Table 4.15 presents data on age distribution of participants.

Table 4.15: Age distribution of participants

Age	Frequency	Percentage
15 – 25	19	43
26 – 35	16	36
36 – 45	5	12
45 and above	4	9
Total	44	100

Table 4.15 reveals that the highest number of 19(43%) respondents were between the ages of 15-25 years. This is followed by 16(36%) of those who were between 26-35 years. The least of the respondents, 4 (9%) were above the age of 45.

Table 4.16 presents data on level of education distribution of participants.

Table 4.16: Distribution of level of education

Level	Frequency	Percentage
SSCE	2	5
Undergraduate	10	23
First Degree	19	43
Masters	12	27
PhD	1	2
Total	44	100

Table 4.16 reveals that, among the respondents, first degree holders and masters' students were the highest with 19 (43%) and 12 (28%) respectively, while PhD holders with the lowest with 2%.

Table 4.17 presents data on occupation distribution of participants.

Table 4.17: Distribution of occupation of participants

Occupation	Frequency	Percentage
Student	23	54
Applicant	4	9
Civil Servant	12	28
Business Owner	4	9
Total	44	100

Table 4.17 reveals that 23(54%) of the attendees are students and 12(28%) are civil servants, while the remaining 8(18%) are applicants and Business owners.

4.3.5.2 Answers to Workshop Questionnaire A (SDGA)

Question 1: Have you heard about the Sustainable Development Goals before now?

Table 4.18: Response on whether they have heard about the Sustainable Development Goals

Options	Frequency	Percentage
Yes	29	66
No	15	34

Total	44	100
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Table 4.18 shows that 29(66%) of the respondents have heard about the Sustainable Development Goals before the workshop training, while 15(34%) replied they had not heard of sustainable development goals before the workshop training.

Question 2: Have you been involved in any activity to promote Sustainable Development Goals?

Table 4.19: Involvement in any activity to promote Sustainable Development Goals?

Options	Frequency	Percentage
Yes	13	30
No	31	70
Total	44	100

Table 4.19 reveals that 31 (70%) of the respondents had never been involved in any activities to promote Sustainable Development Goals until after they attended the workshop, while 13 (30%) replied they had been involved in some activities regarding SDGs before.

Question 3: Have you visited the Niger State Public library before?

Table 4.20: Visitation of the Public Library

Options	Frequency	Percentage
Yes	13	30

No	31	70
Total	44	100

Table 4.20 reveals that, 31 (70%) of the attendees were visiting the Niger State Public Library for the first time that day while the remaining 13 (30%) claimed they had visited the library before.

Question 4: What is the level of your involvement in the following social media handles?

Table 4.21: Level of involvement in social media handles

Social media	Very High	High	Low	Very Low	No involvement at all	Total	>3.0 Mean	Rank
WhatsApp	28 (65%)	11 (25%)	2 (5%)	1 (2%)	1 (2%)	44	4.4	1 st
Instagram	11 (25%)	5 (12%)	13 (30%)	5 (12%)	9 (21%)	44	3.1	5 th
Telegram	6 (14%)	8 (20%)	17 (41%)	4 (11%)	6 (14%)	44	3.2	4 th
LinkedIn	2 (5%)	10 (24%)	13 (32%)	5 (12%)	11 (27%)	44	2.6	6 th
Twitter	9 (22%)	9 (22%)	13 (32%)	3 (7%)	7 (17%)	44	3.1	5 th
Electronic Mail	16 (38%)	15 (35%)	4 (10%)	0	7 (17%)	44	3.7	3 rd
Facebook	16 (39%)	13 (32%)	8 (19%)	2 (5%)	2 (5%)	44	3.9	2 nd

Table 4.21 reveals that the respondents' involvement with social media handles. The results revealed a high number of respondents with mean value of 4.4 are involved in whatsapp. This is closely followed by facebook with a mean value of 3.9. Electronic mail, telegram, instagram and twitter had mean values of 3.7, 3.2, 3.1, and 3.1 respectively. While, linkedIn had the lowest number of respondents with mean value 2.6

4.3.5.3 Answers to Workshop Questionnaire B (SDGQB)

After the completion of the workshop, Sustainable Development Goals Questionnaire B (SDGQA) was distributed to get the feedback of the attendees on the workshop. The analysis of the responses collated includes the following;

Question 5: How useful have you found this workshop?

Table 4.22: Usefulness of the workshop

Options	Frequency	Percentage (%)
Extremely Useful	33	82
Moderately Useful	5	13
Somewhat Useful	2	5
Not useful	-	-
Total	40	100

Table 4.22 reveals that majority, 33(82%) of the respondents found the workshop extremely useful while, 5(13%) of the attendees responded they found it moderately useful. The workshop was therefore found to be extremely useful.

Question 6: How willing are you to attend another workshop on one of the Sustainable Development Goals?

Table 4.23: Willingness to attend another workshop

Options	Frequency	Percentage (%)
Extremely willing	29	73
Moderately willing	11	27
Somewhat willing	-	-
Not willing	-	-
α Total	40	100

Table 4.23 reveals that 29 (73%) of the respondents were extremely willing to attend another workshop while 11(27%) of the respondents stated that they were moderately willing to attend another one.

Question 9: Would you be willing to pay a token between #2000 - #5000 for a training session to learn entrepreneurial skills?

Table 4.24: Willingness to pay a token fee for training

Options	Frequency	Percentage
Yes	32	82
No	7	18
Total	39	100

Table 4.24 reveals that 32(82%) of the respondents that completed the workshop training were willing to pay the token for a training session to learn entrepreneurial skills while only (18%) replied otherwise.

Question 10: What entrepreneurial skills would you like to learn more about?

Table 4.25: Entrepreneurial skills to be learnt

Skills	Frequency	Percentage
Tailoring	9	23
Photography	7	18
Graphic design	12	30
Web design	9	23
Online trading	22	55
Baking	9	23

Table 4.25 reveals that majority of the respondents, 22(55%), were more interested in learning more about online trading and Graphic design than other entrepreneurial skills.

4.3.6 Research question six: How can the sustainable development goals implementers use public library resources to enhance sustainable development goals?

Interview schedule on the influence of public libraries on the implementation of sustainable development goals in Nigeria was used to answer this research question. See appendix D for the interview schedule.

The sustainable development programme officers that were interviewed were selected based on purposive sampling (typical case sampling) procedure. According to Nikolopoulou (2022), participants of a typical case sampling are in most cases based on their possibility of behaving like everyone else sharing the same attributes or experiences. As such, Niger State, Lagos State and Adamawa State programme officers for sustainable development goals were interviewed to obtain data for the qualitative analysis.

A Thirty minutes interaction was organised for each programme officer to answer interview questions (see Appendix D) at different times and the responses were recorded, coded and presented in graphs and word cloud format. These interview questions were set to determine the goals, strategies, and collaborations of the SDG organization in Nigeria with the public libraries and challenges faced in their implementation processes. Their responses helped to answer research question seven (7). To carry out the data transcription and analysis, this study adopted the Braun and Clarke (2019) thematic analysis approach, involving a six-phase of qualitative data analysis. These phases are: transcribing data, generate initial code, search for themes,

review themes, define and name themes, and finally present the final report of the analysis. In addition, with the assistance of a certified Data Analyst, the *Provalis* Qualitative Data Analysis (QDA) Miner (Version 5) software was employed to get the themes and the subthemes obtained from the coding framework.

What are your goals as an organisation?

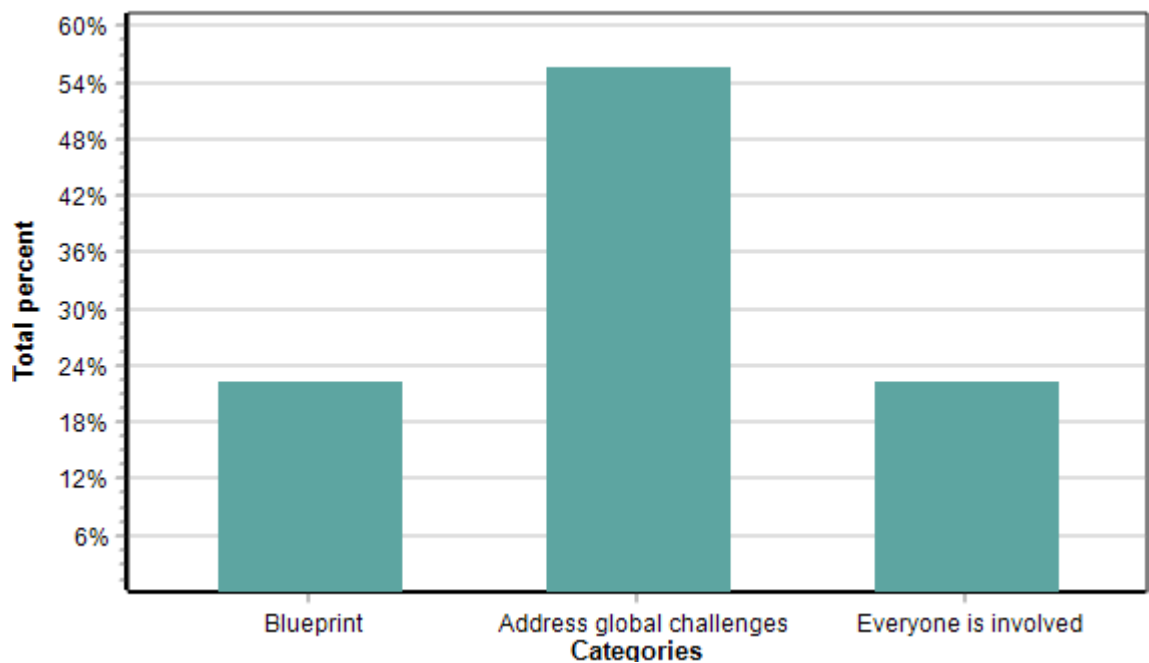


Figure 4.2: SDGS Organisation Goals

In response to the first question which is to know the goals of the SDGS office as an organisation, about fifty-five percent (55%) stated that their major goal as an organisation is to address the global challenges. This resonates with what the SDGS are all about, which is to find solution to the challenges of human existence all over the world. As pointed out by UN (2015), the 17 goals and their 169 targets cover economic, environmental, health and social developments. This response is followed by twenty-three (23%) response rate on creating a blueprint to achieving these goals which is what the goal 17 is all about, that is, to strengthen the means of implementation and revitalise

the global partnership for sustainable development. The third most popular response with also twenty- three (23%) response rate as to what the Goals of the organisation is, is that everyone is involved - No one is left behind. These goals are meant for people; so involving everyone is a sure way of achieving the goals.

What are the strategies adopted in sensitising people on the existence of sustainable development goals?

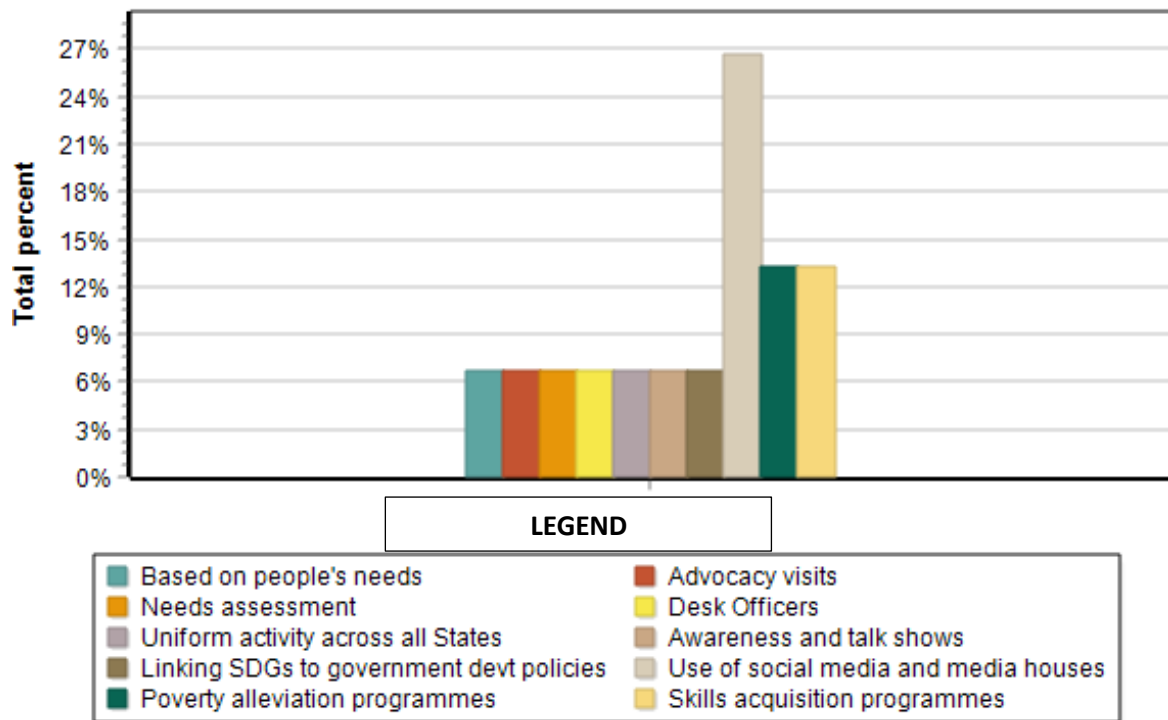


Figure 4.3: SDGS sensitisation strategies

In response to the second question on the strategies adopted in sensitising people on the existence of SDGS, a number of strategies were mentioned by the interviewees which are depicted in Figure 4.2. Social media had the highest percentage with 26%, depicting that social media is the most used strategy for sensitising people on the existence of Sustainable Development Goals.

Poverty alleviation and skills acquisition programmes ranked the 2nd highest with 13% of the total responses which is a very viable way of getting people’s attention. This is

because people’s most sought-after need is economic empowerment. So one sure way of getting their attention is through poverty alleviation programmes. This finding corroborates UN (2018) which stated that poverty alleviation must be mainstreamed into the national policies and actions in accordance with the internationally agreed sustainable development goals. This promotes people-centred approach to poverty eradication, advocating the empowerment of people living in poverty through their full participation in all aspects of political, economic and social lives.

Other strategies whose responses were at 7% each are Advocacy visits, desk officers, awareness programmes and talk shows, linking SDGS to government development policies, uniform activity across states, needs assessment and based on people’s needs.

Do you consider Public Libraries as viable tools in achieving the SDGs?

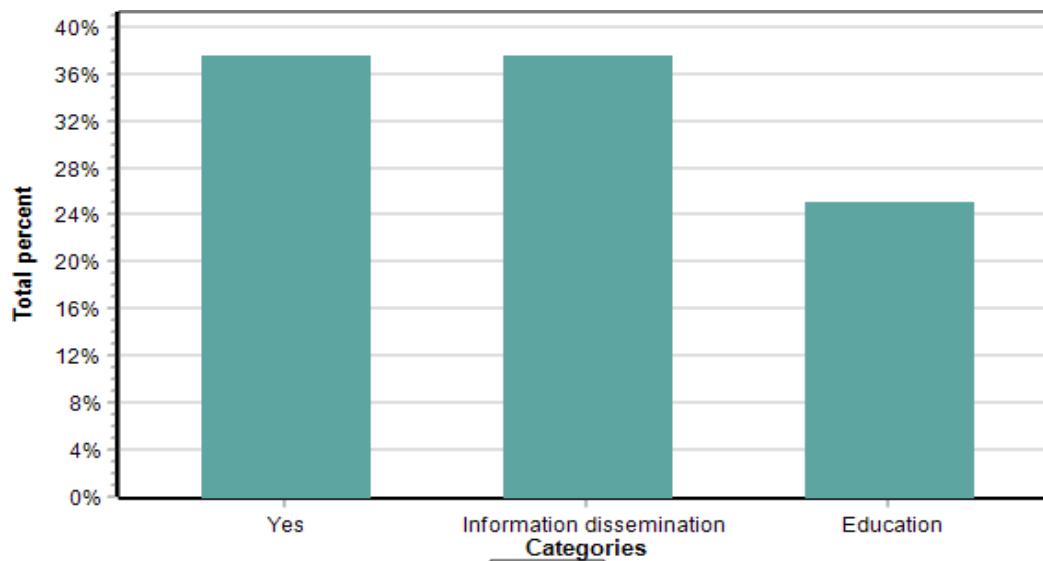


Figure 4.4: Public Libraries & SDGS

From the given responses, the respondents agreed with a response rate of thirty-eight percent (38%) that public libraries were viable tools in the achievement of sustainable development goals because they are good and important educational tools for everybody

in the society and also very strategic in information dissemination. All the interviewees agreed that public libraries are important educational institutions in the society.

Has the organisation done any project in collaboration with public libraries?

Expatiate

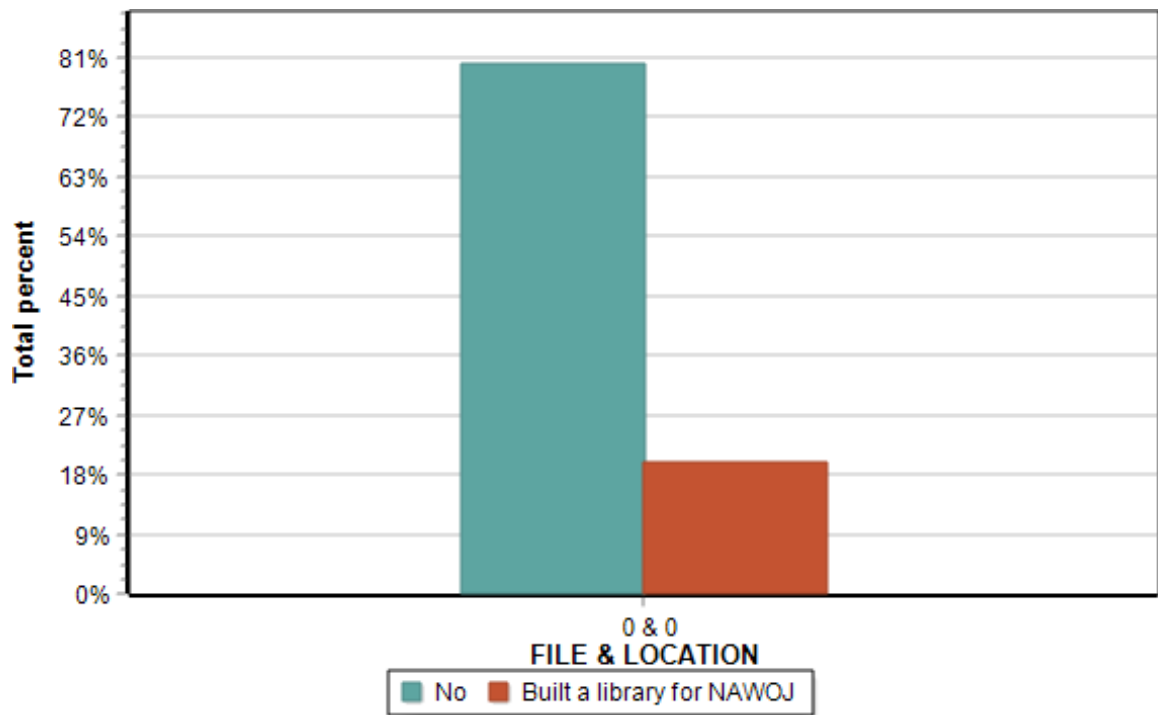


Figure 4.5: Collaboration between SDG Offices & Public Libraries

All the interviewees stated that they had not had any collaborations with the public library for work on any developmental purposes. Niger State SDG office however pointed out that they had helped the Nigerian Association of Women Journalists (NAWOJ) in the establishment of their library and that was the contact as they have had with the library.

How has the current trend of Covid 19 affected the achievement of SDGs?

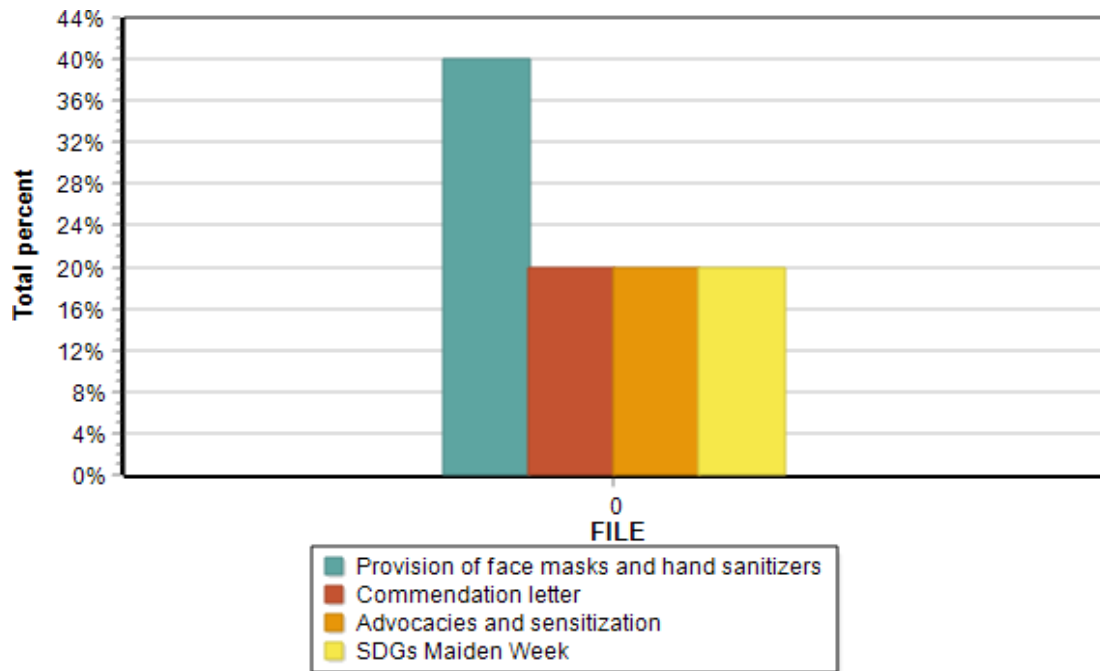


Figure 4.6: COVID-19 & SDGS Implementation

All the interviewees agreed that Covid 19 did not slow down their activities as an organisation. Forty percent (40%) mentioned that they had made face masks and hand sanitizers available to many public places. Niger State SDG office received a commendation letter from the governor's office in recognition of their activities during the pandemic period. With a response rate of twenty percent (20%) the SDG offices, during the pandemic, used that opportunity for advocacies and sensitisation in order to inform people and enlighten them on sustainable development goals; Lagos State SDG office also started an SDGs week during the period in order to sensitise and educate the populace.

What are the challenges you have encountered in carrying out your duties?

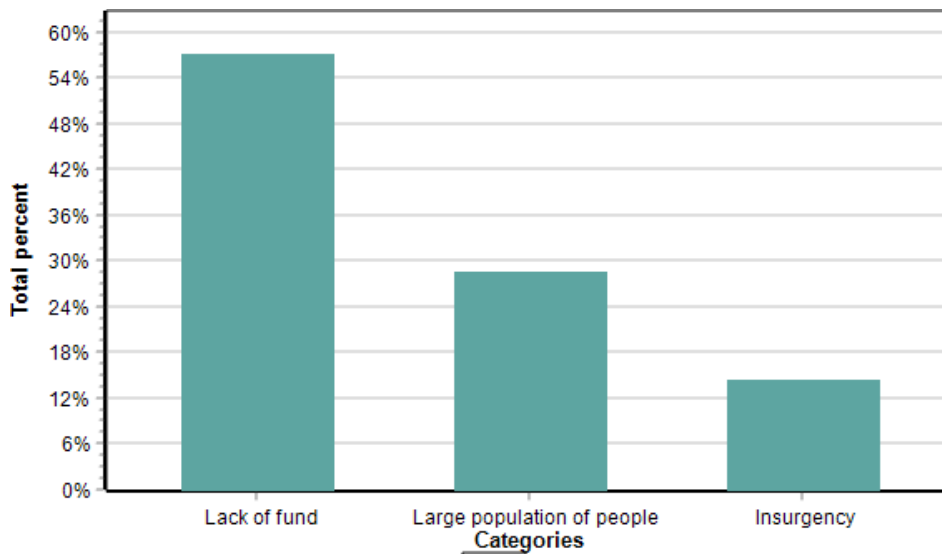


Figure 4.7: Challenges with SDGS Implementation

On the challenges faced, with a response rate of fifty-eight percent (58%), all the interviewees agreed that their major challenge is lack of adequate funds to carry out the projects needed by the people in the society. This is closely followed by twenty-nine (29%) response rate confirming that the office is dealing with a large population of people with diverse needs. As such, adequate planning is needed so that everyone in the society is carried along. This challenge is followed by insurgency which has response rate of fourteen percent (14%). The state of insecurity in the country has crippled many developmental activities in areas where they are most needed. Officials are afraid of going to some local governments for fear of abduction or being attacked.

The perception of SDG offices, their activities and challenges were captioned in a word cloud. Figure 4.7 represents a word cloud showing the words in order of priority.

- Address global challenges
- Lack of funds

- Desk offices
- Use of social media/media houses
- Poverty alleviation programmes
- Education
- Needs assessment
- Information dissemination
- Linking sustainable development goals to government; development policies
- Advocacies and sensitization
- Uniform activity across the states



Figure 4.8 A Word Cloud Showing the General Overview of Sustainable Development Goals & Public Library in Nigeria.

From Figure 4.7, it is revealed that the activities of the sustainable development goals office of implementing the SDGs and involving the public library in the implementation processes were adequately captured.

4.3.7 Research question seven: What are the hindrances that curtail the use of library resources in the implementation of sustainable development goals?

Public libraries' staff were asked about the hindrances that curtail the use of library resources in the implementation of sustainable development goals by Nigerian public libraries.

Table 4.26 presents data on the factors inhibiting the implementation of SDGs by Nigerian Public Libraries.

Table 4.26: Responses of library staff on factors inhibiting the implementation of sustainable development goals by Nigerian public libraries.

S/N	Items	Strongly Agreed (SA) F(%)	Agreed (A) F(%)	Disagreed (D) F(%)	Strongly Disagreed (SD) F(%)	Total	Mean	SD	Decision >=2.5
1	Poor Power supply	44(40.0)	42(38.2)	8(7.3)	16(14.5)	110(100)	3.04	1.99	Agreed
2	Poor Infrastructure	28(25.5)	48(43.6)	28(25.5)	6(5.5)	110(100)	2.89	1.46	Agreed
3	Inadequate material resources	26(23.6)	62(56.4)	22(20.0)	0(0)	110(100)	3.04	1.99	Agreed
4	Inadequate human resources	12(10.9)	52(47.3)	36(32.7)	10(9.1)	110(100)	2.60	1.31	Agreed
5	Inadequate knowledge of SDGs	24(21.8)	36(32.7)	44(40.0)	6(5.5)	110(100)	2.71	1.33	Agreed
6	Non-attendance of conferences / seminars	28(25.5)	44(40.0)	36(32.7)	2(1.8)	110(100)	2.89	0.64	Agreed
7	No internet connectivity	32(29.1)	32(29.1)	38(34.5)	8(7.3)	110(100)	2.80	1.06	Agreed
8	Lack of sufficient awareness on the SDGs	30(27.3)	50(45.5)	22(20.0)	8(7.3)	110(100)	2.92	0.22	Agreed

Table 4.26 shows responses of library staff on factors inhibiting the implementation of SDGS by Nigerian public libraries. The table reveals that all the statements listed have a high mean score above 2.5. These statements include, poor power supply (x=3.04); poor infrastructure (x=2.89); inadequate material resources (x=3.04); inadequate human resources (x=2.60); inadequate knowledge of SDGS(x=2.71); attendance of conferences and seminars (x=2.89) no internet connectivity (x=2.80); and lack of sufficient awareness on the SDGS (x=2 .93).

4.4 Hypotheses Testing

4.4.1 Result to Hypothesis One

H₀₁ - There is no significant relationship between the availability of material resources in the public libraries and successful implementation of sustainable development goals in Nigeria.

Table 4.27 presents Hypothesis One result.

Table 4.27: Chi-Square Tests on Hypothesis One

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.583 ^a	8	.295
Likelihood Ratio	12.691	8	.123
Linear-by-Linear Association	.285	1	.594
N of Valid Cases	20		

Table 4.27 showed that there is a positive relationship between the availability of material resources and implementation of SDGS. This means that implementation of the SDGS was made easier, swift and more widespread if the public libraries have material

resources. That is, the higher the availability of material resources, the higher the level of implementation of SDGS, with Pearson chi-square value (9.583) and the p-value 0.295. Since the p-value is >0.05 , the null hypothesis is rejected. This signifies that, availability of material resources in printed form, current ICT components, constant power supply, conducive environment, Internet connectivity, good infrastructure, among others, are very vital in using the public libraries in Nigeria as implementation tools of Sustainable Development Goals.

4.4.2 Result to Hypothesis Two

H₀₂ - There is no significant relationship between the librarians' level of awareness and the implementation of sustainable development goals

Table 4.28 presents Hypothesis Two result.

Table 4.28: Chi-Square Tests on Hypothesis Two

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.000 ^a	3	.290
Likelihood Ratio	6.279	3	.099
Linear-by-Linear Association	5.786	1	.016
N of Valid Cases	9		

Table 4.28 showed that there is a positive relationship between librarians' level of awareness and the implementation of sustainable development goals in Nigeria, showing that as library staff level of awareness about SDGS increases, the rate of implementation of SDGS will be high, with Pearson chi-square value (9.000) and the p-value 0.290. Since the p-value is >0.05 , the null hypothesis is rejected. This signifies that, the higher the awareness level of the public library staff, the higher the rate of

SDGs implementation in Nigeria. Awareness refers to not only hearing about it but also actively participating in programmes that relate to Sustainable Development Goals in their libraries.

4.4.3 Result to Hypothesis Three

H₀₃ - There is no significant relationship between the quality of human resources in public libraries and the implementation of sustainable development goals.

Table 4.29 presents Hypothesis One result.

Table 4.29 Chi-Square Tests on Hypothesis Three

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.406 ^a	1	.236
Continuity Correction ^b	.014	1	.906
Likelihood Ratio	1.780	1	.182
Linear-by-Linear Association	1.250	1	.264
N of Valid Cases	9		

Table 4.29 showed that there is a positive relationship between the quality of human resources in the public libraries and successful implementation of sustainable development goals in Nigeria. This showed that as the quality of human resources increases, the rate of implementation of SDG will be high with Pearson chi-square value (1.406) and the p-value 0.236. Since the p-value is >0.05, the null hypothesis is rejected. This signifies that the implementation of SDGs will be made easier and faster with the presence of quality library staff, quality in the areas of constant training, attendance of conferences, active presence on social media platforms, in order to be kept abreast of recent happenings around the world.

4.5 Summary of the Findings

The summary of the study is based on the findings derived from the achievement of the objectives that guided the study:

1. There is a high level of awareness of sustainable development goals in public libraries. However, the awareness level does not commensurate with their level of involvement in SDGS related activities which is relatively low in the public libraries.
2. Public libraries have capable hands in terms of human resources. Although, there has not been any training or activities to enhance their participation in the implementation of SDGS.
3. The users of public libraries agreed that public libraries are very useful and instrumental in getting information and knowledge, but have not had any information about SDGS from the public libraries.
4. The public libraries barely have working infrastructure, power, latest and working IT components and other vital material resources to aid in the implementation of SDGS in Nigeria.
5. Sensitisation workshops, conferences, collaborations among governmental bodies and other awareness programmes are vital ways that library resources can be utilised by the SDG implementers in synergy with the public libraries to enhance the implementation of SDGS in Nigeria.
6. SDGS implementers in Nigeria have not, in any way used the public libraries as a tool in their jobs of implementing SDGS in Nigeria.
7. The findings revealed that lack of infrastructure, inadequate ICT components among other pressing needs are part of the challenges faced in using the public libraries as a tool for implementing SDGS in Nigeria.

8. The findings revealed that, there is a significant relationship between the quality of available material resources in the public libraries and successful implementation of SDGS in Nigeria.
9. The findings revealed that, there is a significant relationship between the librarians' level of awareness and the implementation of SDGS.
10. The findings revealed that, there is a significant relationship between the quality of human resources in public libraries and the implementation of SDGS in Nigeria.

4.6 Discussion of Findings

Research question 1: What is the level of awareness of sustainable development goals in public libraries in Nigeria?

Research question one sought to find out the level of awareness of SDGS in public libraries in Nigeria and the data on Table 4.1 answered this question. The mean results of statements 2, 3, 4, 5, 6, 7 and 8 are < 2.5 , which means that the decision is rejected. The responses from the first statement revealed that a large number claimed to have some level of awareness of the existence of SDGS, while, a smaller number claimed not to have any awareness of the existence of SDGS at all. It is obvious from the other responses that a large number of respondents have no involvement at all with activities that have to do with SDGS. That Librarians are aware of the term SDGS, does not mean they understand or are aware of the implementation strategies of the SDGS. So, the knowledge the librarians had on the SDGs had nothing to do with their involvement in helping to attain the goals. This is in line with the findings of Igbinovia (2016) who stated that many librarians were aware of the 2030 SDGS agenda but lack any in depth knowledge of it or were simply nonchalant about it. The authors further noted that

public libraries are not making any deliberate plans to keep library users up-to-date and involved with the ongoing developmental trends. This fact is further made obvious from Table 4.1 as it appears that the public library has no adequate information resources on the SDGS. IFLA (2016) posited that public libraries can make a fundamental contribution to daily survival and social economic development by being aware of developmental strategies that could help improve the people's livelihood and also get involved in providing information to people in their communities, and one of such strategies is the SDGS. Twenty-two respondents out of Fifty-five stated that they had not partaken in programmes to end hunger and achieve food security but a large number of respondents answered in affirmative that they partook in programmes that help in providing quality education for the people. In summary to research question 1, it is obvious that the public libraries in Nigeria have some form of knowledge of the existence of SDGS but have not particularly had any significant collaboration with SDG offices. Although, there is an indication that some of public libraries in Nigeria have tried to partake in programmes that will benefit their communities.

Research question 2: What are the qualities of the available human resources in the public libraries that can enhance the achievement of sustainable development goals?

Research question two sought to find out the quality of human resources available in the public library that can enhance the attainment of the SDGS. From the responses from public library staff, it can be deduced that there were more staff with diploma and other qualifications in library science than there were with a degree and above. Table 4.8b further shows that there is indeed a low attendance in conferences, seminars and workshops by public library staff. This could be because of the financial constraints or the staff not seeing the need for attendance of such programmes as a way of improving

themselves and services. This collaborates with the findings of Ismail and Chi (2018) who stated that by providing a wide range of materials to support education and making information accessible to all, the public library can bring economic and social benefits to individuals and the community. It is not just enough to have certificates; but constant renewing of acquired knowledge through attendance of conferences, workshops and seminars is very vital for the public library staff's personal and professional growth. Attendance of such programmes will expose the staff to recent happenings, in the library field of which SDG implementation is one.

On the use of Facebook and WhatsApp, majority of the respondents agreed that they were active on Facebook and Whatsapp, while activity on Instagram and LinkedIn were relatively low. This finding shows a low activity rate of public librarians in accordance with social media usage. Thus, this could play a very important role in their inability to effectively disseminate information. Activeness on social media is another vital tool for the exposure of Library staff. Most social media sites like Twitter, Instagram, WhatsApp, Facebook, LinkedIn and others have clusters that relate solely public libraries, librarianship, SDGs and so on. Public librarians being active on these social media sites can go a long way in not only equipping them but also creating a connection for them with other agencies. This finding is further corroborated by Ejechi (2017) who rightly noted that social media is an effective tool that can contribute to the awareness level of library staff. In this digitised age, the role of public library has been enhanced all over the world by the advent of information technology. Pearson and Hall (2015) suggested further that public libraries should recognise and exploit the opportunities provided by the continued and increasing development in ICT so that they can provide an important access points to information. As such, for public library staff to be effective in the Information Technology age, they have to be wholly involved in the

modern way of information acquisition and dissemination, which involves being active on social media platforms so that they can keep abreast with what is happening around the world.

Research question 3: What is the influence of public libraries on the overall development of its users?

Research question three sought to get information from the public library users. Majority of the library users agreed that they were constant library users. These results are feasible because respondents were gotten at the public library. A large number of respondents found at the public libraries were young people between the ages of 16 and 25 and were primarily students who went the library to look for quiet environment to read their school books in preparation for exams or do their assignments. Another reason for a high number of younger people in the public library will be that the particular public library has ICT related components and internet connectivity. This was the case at the public libraries in Lagos and Nasarawa states. In fact, Nasarawa state public library hold CBT training for secondary school leavers who are preparing to write Joint Admissions Matriculation (JAMB) examinations. This accounts for the presence of a large number of young people at the Nasarawa state public library. This is in line with the findings of Boongaarts (2016)'s study, who posited that the opportunity to develop personal creativity and pursue new interest is important to human development and to achieve these, people need access to knowledge and works of the imagination and that is what the public library provides through different media. A large number of respondents agreed that the library has information materials to promote equitable education and lifelong learning opportunities information on empowerment and general information materials that can help improve people's livelihood. This point is collaborated by Chewe & Imasiku (2018) who stated that the rapid growth in the

volume of available information and the continuing technological changes have radically affected the way information is accessed and had significant effect on public library and their services.

Research question 4: What are the available material resources in the public libraries that can enhance the implementation of sustainable development goals?

Information communication technology as well as other library material resources are part of the major substance of any public library. The public library needs these tools to effectively carry out its mandate of being the people's university and also an agent of development. Fischer (2018) acknowledged that public libraries provide great value to their communities and such value is often defined by what materials and services libraries provide to their communities. In line with the above results obtained from the observation checklist, it can then be garnered that Nigerian public libraries are ill-equipped and ill-prepared for implementing large developmental policies on their own as such, the need for collaboration of any kind especially with SDG offices become imperative and viable. The poor stocking of information resources and poor quality services makes it difficult for librarians to achieve the purpose for establishing the library, which is summarily to improve the people's livelihood through proper and timely dissemination of life-changing information. Important to note from the observation checklist is the lack of insufficient Information Technology components in majority of public libraries in Nigeria. Ochoa and Pinto (2017) noted that ICTS have the capability of assembling needed resources electronically, thus, making research efforts and developmental activities more convenient and efficient in the public library.

Research question 5: What are the possible ways through which public libraries resources can be utilised to enhance the implementation of SDGS?

The sensitisation workshop demonstrated how the public library can influence the implementation of sustainable development goals in Nigeria. The Niger State Public Library board headquarters was used for the experiment. The results showed that the public library can work together with SDG Offices and other bodies to implement the SDGs. The workshop helped to draw peoples' attention to the Niger State Public library which has been left unattended and redundant with no visible activities taking place there. The activities of the Sustainable Development Goals could help to breathe life into the activities in Nigerian public libraries. The findings also revealed that developmental programmes that would improve the lives of people are welcome ideas. Therefore, it is beneficial to the public libraries, SDG implementers and the general public.

Research question 6: How can the sustainable development implementers use the public libraries' resources to enhance the implementation of SDGs?

The results revealed that the major goal of the SDG office is to address global developmental issues which have to do with general developmental issues ranging from health, education, hunger, environment and security. Closely followed to this, is the goal of carrying everyone along. These findings are supported by Ejechi (2018) who stated that sustainable development goals are important to the growth and development of a country and they guarantee a better quality of life for people now and in the future.

The results also revealed that there is uniformity in the strategies adopted by the SDG offices across the states in sensitizing the people and bringing development to the people. This is based on a set of blueprint from the head office in Abuja. These strategies include, needs assessment, advocacy, skills acquisition, use of social media and media houses, poverty alleviation programmes, talk shows and they should be uniform across all the states.

Most importantly, the results revealed that the public libraries in Nigeria have not been involved or used by the SDG offices as a tool for disseminating information on SDGs or for advocacies and sensitisations on SDGs. This negates Public Libraries 2020 (2015) that is of the view that libraries are an effective way of achieving connectivity in the years to come, when they are used as community hubs to access different forms of information. UN (2015) also drove home this point by stating that public libraries can make an important contribution to economic and social survival by being directly involved in providing information to people in the society.

The results show that interviewees know and agree that the public library is a viable tool for their work, they, in the same vein say that they have not been using the public library as a tool for such. Reasons being that they have not been given a directive to do so and partly because majority of the public libraries are not in a healthy state to be adequately used for sensitisation purpose. As such, this study has demonstrated in one of its objectives, that no matter the state of the Nigerian public libraries, it can still be used to sensitise and educate its clientele, thereby breathing life and activities into them. As such, it becomes an advantage for all parties involved (the public library, the SDG office and the clientele).

Research question 7: What are the factors inhibiting the implementation of sustainable development goals by Nigerian public libraries?

Research question seven sought to find out factors inhibiting implementation of SDGS by Nigerian public libraries. The challenges inhibiting the implementation of SDGS in Nigerian public libraries range from poor power supply, poor infrastructure, inadequate human resources, inadequate knowledge of SDGS, lack of internet connectivity, non-attendance to conferences and seminars and lack of sufficient awareness on the SDGS. The highest mean response is on power supply and inadequate material resources. The

option with the lowest mean value is that of the inadequate human resources; this shows that there has been an increase in the human resources in library science profession. Lack of awareness and lack of internet connectivity also pose a challenge for the public library in carrying out their services. Inadequate knowledge of SDGS and lack of attendance to conferences and seminars were also highly agreed to be a contributing factor to the challenges affecting the implementation of SDGS by the public libraries. This is because adequate knowledge is needed to properly disseminate information and for the implementation of SDG in a way that their impact can be felt. This finding is supported by Lawrence *et al.* (2020) who stated that the major challenges that can hinder Nigeria from achieving SDGs, include, poor funding of education in budgets, out of school children, prolonged neglect of learning environment and facilities, among other factors. The author added that funding was the key issue and that it is also an underlying factor, militating against the achievement of many other challenges.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study concludes that public libraries are vital tools in the implementation of SDGS because of their goals of educating, recreating, informing, enhancing culture and research. Synergy between the public libraries and SDGS implementers will go a long way in not only helping with the implementation of SDGS but also awakening the activities and objectives of public libraries. The public librarians stated that, they were aware of the existence of sustainable development goals but have not been used as tools in the implementation process. Even though some public libraries in Nigeria were involved in some form of developmental programmes, they were not linked to the government activities for the implementation of Sustainable Development Goals. The Sustainable Development Goals implementers stated that they had not in any way had any collaborations with the public libraries but agreed that public libraries are very good tools for reaching a large number of people due to its influence of being the People's University. This fact was demonstrated during the sensitisation workshop held at Niger State public library in collaboration with Niger State Sustainable Development Goals office.

5.2 Recommendations

The study recommended the following:

1. There should be an involvement of public library staff by the government in their developmental activities especially as regards to sustainable Development Goals.

2. Constant training programmes, conferences and workshops should be organised to keep the public libraries staff abreast of the recent happenings, developmental programmes and activities.
3. Public libraries should do more in creating and organising programmes that will impact on the lives of its clientele.
4. Better infrastructure, ICT components, alternative power supply, developmental information materials in form of leaflets, banners, documentaries and so on should be made available in the Nigerian public libraries.
5. Sensitisation workshops and awareness programmes should be organised by the public libraries and SDG implementers and around the community as a way of creating awareness among the people and also as a way of creating a synergy between the public libraries and the sustainable Development Goals office.
6. The parent body of the Sustainable Development Goals office and public libraries in Nigeria, which is the government, should pay attention to the public libraries and bring them up to standard in order to be used as a tools in changing lives. Subsequently, implementers should be given a directive to use the public libraries as a tool for implementing the SDGS.
7. The public libraries should be refurbished and adequately equipped so as to be in tune with the modern and growing demands of the development that people in their communities are in dire need of.
8. Working tools such as internet connectivity, constant power supply, conducive environment, and working ICT components should be readily

made available in Nigerian public libraries in order to put them in a better shape.

9. There should be special awareness programmes organised for the Nigerian public libraries staff, in order to arm them with current SDGs information and create a working synergy between them and the SDG offices.
10. Public Library staff should be given scholarships and opportunities to attend conferences, seminars and workshops, not only in Nigeria but outside Nigeria. This will enable them improve their knowledge on happenings around the world.

5.3 Contributions to Knowledge

The study contributed to knowledge in the following ways:

The study established a synergy in the level of awareness of public library staff and the implementation of Sustainable Development Goals with a P-value of 0.2900 being greater than 0.05.

The study established a symbiotic relationship between the availability of material resources and the implementation of Sustainable Development Goals with a P-value of 0.295 being greater than 0.05 .

The study established that there is a strong connection between the quality of human resources in the Public libraries and the implementation of Sustainable Development Goals with a P-value of 0.236 being greater than 0.05.

The study established that there has been marginal input of implementation of Sustainable Development Goals by the Nigerian Public libraries with an average mean score of 2.35.

5.4 Suggestions for Further Study

The following are suggested for further study:

1. A more in-depth study should be done on how to practically get the government involved in reviving the Nigerian public libraries.
2. A study should be carried out on the influence of other types of libraries on the implementation of Sustainable Development Goals in Nigeria.

3. The sensitisation workshop carried out can be duplicated in other public libraries in Nigeria to create activities and draw people's attention to public libraries, thereby achieving the Sustainable Development Goals.

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APPENDIX A

Population of the Study

S/N	Name of Library	No of Certified Librarians	No of Library Officers (LO)	No of Library Assistants (LA)
1	Abia State Library Board, Umuahia	14	17	20
2	Anambra State Library Board (Prof. Kenneth Dike State Central e-Library), Awka	14	6	48
3	Akwa Ibom State Library Board, Uyo	12	9	8
4	Adamawa State Library Board, Yola	17	17	5
5	Bauchi State Library Board, Bauchi	13	16	7
6	Bayelsa State Library Board, Yenagoa	1	2	2
7	Benue State Library Board, Makurdi	5	18	3
8	Borno State Library Board, Maiduguri	--	-	-
9	Cross River State Library Board, Calabar	5	6	20
10	Delta State Library Board, Asaba	21	18	118
11	Ebonyi State Library Board	2	6	27
12	Edo State Library Board, Benin	7	13	23
13	Ekiti State Library Board, Ado-Ekiti	3	2	9
14	Enugu State Library Board, Enugu	8	1	16
15	ERC City Library, Abuja	9	2	10

16	Gombe State Library Board, Gombe	11	21	3
17	Imo State Library Board, Owerri	12	38	14
18	Jigawa State Library Board, Dutse	11	32	23
19	Kaduna State Library Board, Kaduna	5	9	22
20	Kano State Library Board, Kano	24	64	88
21	Katsina State Library Board, Katsina	7	29	99
22	Kebbi State Library Board, Birini- Kebbi	2	12	24
23	Kogi State Library Board, Lokoja	3	12	1
24	Kwara State Library Board, Ilorin	10	26	11
25	Lagos State Library Board, Lagos	10	3	-
26	Nassarawa State Library Board, Lafia	2	19	4
27	Niger State Library Board, Minna	6	10	20
28	Ogun State Library Board, Abeokuta	5	3	16
29	Ondo State Library Board, Akure	2	5	10
30	Oyo State Library Board, Ibadan	9	3	-
31	Osun State Library Board, Osogbo	1	3	3
32	Plateau State Library Board, Jos	3	13	5
33	River State Library Board, Port Harcourt	1	6	3
34	Sokoto State Library Board, Sokoto	3	12	23
35	Taraba State Library Board, Jalingo	5	55	13
36	Yobe State Library Board, Yobe	8	20	70
37	Zamfara State Library Board, Gusau	2	10	10
Total		273	588	915

Source: LRCN Report (2018)

APPENDIX B

Cronbach Alpha Reliability Analysis Result

Notes

Output Created	30-NOV-2019 21:37:44
Comments	
Input	Data Active Dataset Filter Weight Split File N of Rows in Working Data File Matrix Input
Missing Value Handling	C:\Users\de11\Desktop\DEFAULT BACKUP\ANALYSIS\Miriam.sav DataSet1 <none> <none> <none> User-defined missing values are treated as missing. Cases Used Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=SB1 SB2 SB3 SB4 SB5..... /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time 00:00:00.00 Elapsed Time 00:00:00.04

CRONBACH ALPHA RELIABILITY COEFFICIENT DATA

SECTION B

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.793	.779	9

SECTION C

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.915	.854	10

SECTION D

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.709	.631	9

SECTION E

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.855	9

The Average Cronbach's Alpha = $0.793 + 0.854 + 0.709 + 0.872/4$
 $= 3.228/4 = 0.807$

Cronbach's Alpha = 0.81 (This indicates that the Instrument is reliable)

APPENDIX C

Dept. of Library Information Technology
School of Information Communication
Technology
Federal University of Technology, Minna.
Niger state.
5th January, 2021.

Dear Respondents,

Invitation to participate in a study titled: *The Influence of Public Libraries on the Attainment of Sustainable Development Goals in Nigeria.*

My name is Salubuyi, Miriam Ayinda. I am conducting a research in the Department of Library Information Technology. We are inviting you to participate in a study entitled: ***The influence of public libraries on the attainment of sustainable development goals in Nigeria.*** This is expected to collect information that could provide deeper understanding on the influence of public libraries on the implementation of sustainable development goals in Nigeria.

You are invited because of your position as a public library staff. About 158 participants will be involved in this study. The questionnaire will take about 10minutes to be completed, it is attached herewith.

Your participation in this study is voluntary and you are under no obligation to consent to participate. There is no foreseeable risks or discomfort anticipated to any participant. You have the right to insist that your name should not be recorded anywhere and that no one except the researcher and the identified members of the research team will know about your involvement in this research. There will be no disbursement or any incentives for participation in this research.

On completion of this research, the thesis will be made available on the federal university of technology, Minna website – www.futminna.edu.ng, via the institutional repository.

Thank you for taking time to read this information sheet and for participating in study.

Salubuyi, Miriam Ayinda

PhD/SICT/2017/1047

**THE INFLUENCE OF PUBLIC LIBRARIES ON THE ATTAINMENT OF
SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA QUESTIONNAIRE
(QIPLASDG)**

INSTRUCTIONS: please, read through the instrument provided (QIPLASDG) to you and respond accordingly based on your opinion or view to the items provided.

Tick () as appropriate the four – point likert type scale given to you in the questionnaire using any of the following: **Extremely aware; Moderately Aware; Slightly Aware; Not at all Aware/ Strongly Agree (SA); Agree (A); Disagree (D) and Strongly Disagree (SD) / Very High (VH); High (H); Low (L); and Very Low (VL).**

Name _____ of _____ your
Institution.....

SECTION A: DEMOGRAPHIC INFORMATION

1. Respondents' Age: (a) Below 25 years
(b) Between 26 – 30 years
(c) Between 31- 35 years
(d) Between 36 – 40 years
(e) Above 40 years

2. Gender: Male () Female ()

3. Years of Service (a) below 5 years
(b) Between 6-10 years
(c) Between 11-15 years
(d) Between 16 – 20 years
(e) Above 20 years

SECTION B

1. Level of awareness of Sustainable Development Goals (SDGs) in public libraries in Nigeria?

S/N	Items	Extremely Aware	Moderately Aware	Slightly Aware	Not at all Aware
1	I have heard about sustainable development goals (SDGs)				
2	I have attended programmes that have to do with SDGs				
3	My library have received training on how best to communicate about SDGs to our users				
4	I have partaken in programmes to end hunger and achieve food security				
5	I have partaken in programmes to help in providing quality education for the people				
6	I have partaken in programmes to ensure sustainable management of water and sanitation for all				
7	There are banners and fliers in the library on the SDGs				
8	My library has in the past organized programmes in relation with development of its community				

2. Available material resources in public libraries that can enhance the attainment of the studied sustainable development goals.

S/N	Items	Very High (VH)	High (H)	Low (L)	Very Low (VL)
1	Fliers on SDGs				
2	Books on SDGs				
3	Technological facilities				
4	Satellite connection				
5	Internet connection				
6	Mobile libraries				
7	Stand by generators				
8	Vehicles for transportation				
9	Mobile libraries				
10	Others please specify				

3. Human resources available in the public library that can enhance the attainment of the studied sustainable development goals.

Items	Number of Staff
Staff with a degree and above in LIS	
Staff with a Diploma and other qualifications in LIS	

Items	Yearly	Once in 2years	Once in 3years	Never
How often do you attend conferences				
How often do you attend Seminars				
How often do you attend workshops				

Items	Always	Sometimes	Rarely	Not at all
How active are you on Facebook				
How active are you on Instagram				
How active are you on LinkedIn				
How active are you on Whatsapp				

4. Factors inhibiting the implementation of Sustainable Development Goals by Nigerian public libraries.

S/N	Items	Very High (VH)	High (H)	Low (L)	Very Low (VL)
1	Poor Power supply				
2	Poor Infrastructure				
3	Inadequate material resources				
4	Inadequate human resources				
5	Inadequate knowledge of SDGs				
6	Non-attendance of conferences / seminars				
7	No internet connectivity				
8	Lack of sufficient awareness on the SDGs				
9					
10	Others please specify				

APPENDIX D

INTERVIEW SCHEDULE ON THE INFLUENCE OF PUBLIC LIBRARIES ON THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA.

Question: What is the level of interaction between sustainable development goals offices and public libraries

1. What are your goals as an organisation?
2. How active have you been working to sensitization of the people on the existence of sustainable development goals?
3. Do you organize workshops and seminars to teach other stake holders how to spread the word on SDGs?
4. Have done any project on sensitization with the public library?
5. What are the available resources that help with your job?

APPENDIX E

OBSERVATION CHECKLIST

WHAT ARE THE AVAILABLE ICT FACILITIES IN PUBLIC LIBRARIES IN NIGERIA?

MATERIALS	AVAILABILITY	NUMBER	CONDITION
<p>A. Materials on SDGs Fliers on SDGs Books on SDGs Journals on SDGs Posters on Issues of Development Documentaries development issues Stand by generator Power supply Vehicles for transportation Mobile libraries</p> <p>B. Computer Facilities Computers Scanners Printers UPS CD-ROM Internet connection</p> <p>C. Audio visual/media equipment Satellite connection Projectors Television Radio Digital cameras Audio tapes</p>			

APPENDIX F

Dept. of Library Information Technology
School of Information communication Technology
Federal University of Technology, Minna.
Niger state.
5th January, 2019.

Dear Respondents,

Invitation to participate in a study titled: *The Influence of Public Libraries on the Attainment of Sustainable Development Goals in Nigeria.*

My name is Salubuyi, Miriam Ayinda. I am conducting a research in the Department of Library Information Technology. We are inviting you to participate in a study entitled: *The influence of public libraries on the attainment of sustainable development goals in Nigeria.* This is expected to collect information that could provide deeper understanding on the influence of public libraries on the implementation of sustainable development goals in Nigeria.

You are invited as a public library user. About 385 participants will be involved in this study. The questionnaire will take about 5 minutes to be completed, it is attached herewith.

Your participation in this study is voluntary and you are under no obligation to consent to participate. There is no foreseeable risks or discomfort anticipated to any participant. You have the right to insist that your name should not be recorded anywhere and that no one except the researcher and the identified members of the research team will know about your involvement in this research. There will be no disbursement or any incentives for participation in this research.

On completion of this research, the thesis will be made available on the federal university of technology, Minna website – www.futminna.edu.ng, via the institutional repository.

Thank you for taking time to read this information sheet and for participating in study.

Salubuyi, Miriam Ayinda

PhD/SICT/2017/1047

**THE INFLUENCE OF PUBLIC LIBRARIES ON THE ATTAINMENT OF
SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA QUESTIONNAIRE
(QIPLASDG)**

INSTRUCTIONS: please, read through the instrument provided (QIPLASDG) to you and respond accordingly based on your opinion or view to the items provided.

Tick () as appropriate the four – point Likert type scale given to you in the questionnaire using any of the following: **Strongly Agreed (SA); Agreed (A); Disagreed (D) and Strongly Disagreed (SD)**

Name of your

Institution.....

SECTION A: DEMOGRAPHIC INFORMATION

1. Respondents' Age: (a) Between 16 – 20 years
(b) Between 21- 25 years
(c) Between 26 – 30 years
(d) Between 31-35 years
(e) Between 36 – 40 years
(f) Above 40 years

2. Gender: Male () Female ()

3. Occupation: Student ()
 Civil Servant ()
 Business owner ()
 Unemployed ()

Influence of public libraries on the empowerment of its users

S/N	Items	Strongly Agreed (SA)	Agreed (A)	Disagreed (D)	Strongly Disagreed (SD)
1	I am a constant library user				
2	I get up to date information from the public library				
3	I get information that helps me with my business or work or school				
4	I have attended organized programmes in the library on development before				
5	The library has information materials that can help improve people's livelihood				
6	The library has information materials on sanitation and better access to portable water				
7	The library has information materials to promote equitable education and promote lifelong learning opportunities				
8	I get adequate information on empowerment from the library				
9	Others development activities in the library please specify				

APPENDIX G

**Questionnaire for Sustainable Development Goals Sensitization Workshop
Attendees**

QUESTIONNAIRE A

SECTION A

GENDER: Male Female

AGE:

15-25

26-35

36-45

45 and above

LEVEL OF EDUCATION

SSCE

Undergraduate

First Degree

Masters

PhD

Non-Literate

WhatsApp Number.....

Email:.....

OCCUPATION

Student

Applicant

Civil Servant

Business Owner

Section B

1. Have you heard about the Sustainable Development Goals before now?

Yes

No

2. Have you been involved in any activity to promote Sustainable Development Goals?

Yes

No

3. Have you visited the Niger State public library before now?

Yes

No

4. What is the level of your involvement in the following social media handles?

	Very High	High	Low	Very Low	No involvement at all
Whatsapp					
Instagram					
Telegram					
Instagram					
LinkedIn					
Twitter					
Electronic Mail					
Facebook					

Questionnaire B

5. How useful have you found this workshop?

Extremely Useful	
Moderately useful	
Somewhat Useful	
Not Useful	

6. How willing are you to attend another workshop on one of the Sustainable Development Goals?

Extremely willing	
Moderately willing	
Somewhat willing	
Not willing	

7. Please state: what would you like done differently in the next workshop?

.....

8. What area of the SDGS would you like to learn more about?

.....

9. Would you be willing to pay a token between #2000 - #5000 for a training session to learn entrepreneurial skills?

Yes

No

10. What entrepreneurial skills would you like to learn more about?

Tailoring

Photography

Graphic design

Web design

Online trading

Baking

Others, please specify:

Thank you.

APPENDIX H

Interviewer: Good morning sir

Interviewee 1: Yes, good morning. How are you?

Interviewer: Can we meet you sir?

Interviewee 1: My name is Abdullahi Baba-Arah; DG SDG OFFICE Niger state.

QUESTION 1: What are your goals as an organization?

ANSWER: The SDGs are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face as people including those related to poverty, inequality, climate, environmental, degradation, prosperity, peace and justice. These goals are interconnected and it is important that everyone is involved and carried along.

QUESTION 2: What are the strategies adopted in sensitizing people on the existence of sustainable development goals?

ANSWER: Generally, we try to meet the people's need when they call out for help or when there's a pressing need that needs our intervention. I think the programmes secretary can explain that better for you with details.

QUESTION 3: Do you consider the public library as a viable tool in achieving the SDGs? **ANSWER:** You mean the library?

Yes. The public library

ANSWER: Why not? I agree it is a good instrument for spreading information. Especially as it has to do with educating people. People go there to get information and educate themselves. And that, is one of the aspects the SDGs deal on.

QUESTION 4. Has the organization done any project in collaboration with public libraries?

ANSWER: Well, I have no recollection of us doing any work with them. But as is the custom of the SDGs, we have provided information materials to schools and the community.

You can talk with our programs coordinator for a comprehensive list of our activities and how they are carried out.

Ok sir

QUESTION 5: How has the current trend of Covid 19 affected the achievement of SDGs?

ANSWER: The SDG office have been very active in this period contributing our own quota through providing covid 19 prevention kits like face masks and hand sanitizers. Infact the state government sent us a letter of commendation for our contributions to the state during the pandemic.

QUESTION 6: What are the challenges you have encountered in carrying out your duties?

ANSWER: Well, our challenge has always been that of enough funds to carry out much needed projects. We have so much to do with limited funds.

Ok. Thank you very much for your time

You're welcome.

SECOND INTERVIEWEE

Good morning Sir

Good morning.

Can we meet you sir?

My name is Dahiru Hamisu. I am the programme secretary of the SDGs in Niger state.

QUESTION 1: So, what are your goals as an organization?

ANSWER: From the historical perspective, SDGs is a clarion call to address the challenges affecting third world countries. For example, in Africa we have a lot of challenges like poor water availability, high level of poverty, poor infrastructure, so that's why the United Nations deemed it fit to come up with SDGs. Initially, it was

MDGs (Millennium development goals) which were 7 goals which later metamorphosed into the 17 SDGs we have today.

Question: And the goals have to do with peoples' livelihood

Answer: yes, centered on the well-being of people around the world, the people and their environment.

QUESTION 2. What are the strategies adopted in sensitizing people on the existence of sustainable development goals?

ANSWER: Ah, a lot of strategies have been adopted in terms of sensitizing people or the immediate beneficiaries of the goals. Ehmmmm...Firstly, we go on advocacy visits- we go to traditional leaders, community leaders, we go to people that are to benefit from our projects, we pay visits to sensitize them on what SDGs is all about how they can access our services and again we also go on what we call needs assessment. Needs assessment is done after advocacy, we sensitize them about our goals, our objectives, our missions and vision. So, it is left for the community to write us concerning their needs. For example, need for water, need for healthcare, schools etc. if they write to us through their desk officers...ehmmm, because we have desk officers in each local government. They are our eyes in the community. So, for the desk officers, we normally go for advocacy with them. So, whatever the community needs, they'll write through the desk officers. The desk officers will take it to the local government chairman who will write officially to us about the needs of the community in whatever basic area. When such request is brought, we send our desk officers from the main office to go for needs assessment. Meaning that they'll go to that community to look at at if their request is really needed. If the assessment is done, then we educate them on how we are going to interfere in the project. For example, if it is water that is needed, we go with our water engineer to go and survey. Then they'll bring an estimate. Then we award the contract for borehole drilling or any other need as the case may be.

QUESTION 3. Ok. Do you consider the public library as a viable tool in achieving the SDGs?

ANSWER: Really, the public library to me is an important tool. And also is an irrefutable aspect to the sustainable development goals implementation because they say information is power. And without information, achieving the 17 goals is almost impossible, so, public library has played a very important role in achieving the

sustainable development goals. So even here, we have a lot of pamphlets, books, written by us which we send to public libraries in each state, schools, sent to our key partners for them to know all about SDGs. We even translate into the indigenous languages of the people for easy understanding.

Question: are other states in the country doing the same?

Answer: I believe so; because our activities are ordered from the federal government in conjunction with United Nations...so our activities and mode of operation is uniform. Except if the state doesn't have interest in a particular aspect.

QUESTION 4: so far has the SDG office in Niger State done any project in collaboration with the public library?

ANSWER: hummmmm...yes I can say that but in relation because we have synergy with this National Association of Women Journalists (NAWOJ); we have built a big office for them with a library...well equipped

Question: NAWOJ is under journalism, you built a library for them. I'm talking of Public Library. Have you done anything there or with them, say a sensitization or a collaboration with the public library? From your response I can deduce that there's no direct activity with the public library in most states

Answer: Yes. I will honestly tell you that there isn't any profound collaboration with the public library that I know of.

QUESTION 5. How has the current trend of covid 19 affected your work and activities?

ANSWER: SDGs office in Niger state is considered to be one of the essential service providers. During the covid 19 1st and 2nd waves, we still provided advocacies in various local governments to sensitize the people about covid 19, the protective strategies, and how to use the different protocols to protect themselves like facemasks, sanitizers, hand wash and social distancing. We emphasize on all these whenever we go for advocacy against covid 19 in various local government. We've done in Bosso, Paiko, Chanchaga and Bida.

Question: you mean sensitizing?

Answer: Yes, yes, again even going along giving out some of these facemasks, sanitizers, handwash etc.

QUESTION 6: So, What are your challenges as an organization?

ANSWER: The major challenge we have is that of funds. I think that is our only challenge. Because if we have enough funds well do even more than what is expected from us. And it'll make our work easier.

Ok. Thank you very much for your time

You're welcome

THIRD INTERVIEWEE

Good morning ma

Morning you're welcome

Can you introduce yourself please?

Ok. My name is Duncan Felicia. I work with Lagos SDG invest office.

QUESTION 1: Can you tell us about the aim of the SDGs?

ANSWER: The 2020 global sustainable development agenda is the plan of action for people, planet and their prosperity. And the programme aims to transform our world and improve people's lives and prosperity on a healthy planet. SDGs apply to all countries through partnerships and peace. All countries and their civil societies are actively engaged in implementing the global agenda for a sustainable future.

Ok. Thank you.

QUESTION 2: what strategies has your office adopted in achieving these goals?

ANSWER: Thank you very much. The first and important strategy used in achieving the SDG is creating awareness and talk sessions, the government's

programmes towards achieving the goals. For Lagos state now, the 17 goals are strategically linked to the state's development in accordance with their statutory responsibilities such that multimedia contents will be created around their policies and activities to further foster strategic steps needed for the realisation of these goals. Furthermore, the SDG office is working towards creating informative content such short videos and images on the SDGs and the state government for frequent dissemination on the social media. We use the media a lot in our awareness programmes through interviews, documentaries. Each broadcast outfit is encouraged to identify with a goal while setting its own agenda and supporting the government.

QUESTION 3: Ok. So in the process of dissemination and trying to reach the people with these goals, do you consider the public library as an important tool in achieving the SDGs?

ANSWER: yes I do. Libraries are important institutions in the society. And can be used to spread information.

QUESTION 4: have you done any project in collaboration with the public library

ANSWER: Not specifically

QUESTION: What do mean?

ANSWER: What I mean is that, we may not have specifically used the library in the achieving the SDGs but it's more of the social media era now. And as ive told you earlier on, have maximised the social media and media houses in our SDGs awareness program

QUESTION 5: How has the current trend of Covid 19 affected the achievement of SDGs?

Covid 19 has not slowed us down at all. Infact we had a SDGs maiden week full of activities in September, 2020. If anything the pandemic has heightened the call for dedication to sustainable development.

QUESTION 6: What are the challenges you have encountered in carrying out your duties?

ANSWER: uhm, because Lagos is a largely populated area we have environmental challenges, and a large number of people to serve. And also massive amount of financing is required for the achievement of the SDGs. Ok. And then as a developing country, we seem to have much to do in combating poverty, hunger, inequality and so many other goals that the SDGs address.

Ok. Thank you very much for your time.

You're much welcome.

FOURTH INTERVIEWEE

Good day Sir

Please can you introduce yourself to us?

Yes. I am Solomon Peter Garba. I am a project technical assistant with the Adamawa state sustainable development goals coordinating office

QUESTION 1: Can you tell us a bit about the SDGs activities in Adamawa state.

ANSWER: Yes. Adamawa state is making great strides in the implementation of SDG under the leadership of the current governor, Senator Muhammad Umar Bindow. His administration is focusing on vital areas of poverty alleviation, ensuring quality education, enhancing gender equality and ensuring a peaceful community.

QUESTION 2: ok. So, what are the strategies that has been employed to achieve these?

ANSWER: Yes, like for poverty alleviation, the state created a Bindow for social change (BSC) initiative which launched a 500 million naira package for small and medium entrepreneurs. There has also been skills acquisition programmes for graduates under this scheme. As for education, there has been collaborations between the state and UNICEF and schools in the state have benefitted from the financial packages according to the rehabilitation needed in the schools. For example ...there have been other strategies in the area of gender equality by organising capacity building workshops for women and making food easily available in the whole state. And there has also been activities to cushion effects of insurgency.

QUESTION 3: That's a lot of good activities going on in support of the implementation in the state. To our next question, has there been any collaboration between the SDG office and the public library in the implementation process?

ANSWER: Hummmm, well I can't think of any program or collaboration that we've done with the public library. But the state has numerous strategies in regards to education. For example, the establishment of two teachers' college to retrain teachers in primary and secondary schools. And there is ongoing renovations, rehabilitation and equipping of secondary schools across Adamawa state.

QUESTION 5: How has the Covid 19 affected your activities as regards the implementation of SDGs in the state?

ANSWER: Not much. It is a good thing the government had a structure in place before the pandemic because even during the pandemic and afterwards

QUESTION 6: What are the challenges you have encountered in carrying out your duties?

ANSWER: You see, one of the challenges we have is that of insurgency, because of that we seem to have plenty people to meet their needs than our funds can handle. Then there is the challenge of inadequate financing, unemployment, poverty, inequality among others. But I must say that even with the challenges we face, quick strides are being made in the achievement of SDGs.