UNIVERSITY OF KWAZULU-NATAL

INYUVESI YAKWAZULU-NATALI

PROVISION OF PUBLIC LIBRARY SERVICES TO MEET THE INFORMATION NEEDS OF RURAL DWELLERS IN THE NORTH-WESTERN ZONE OF NIGERIA

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Thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy (Information Studies) in the School of Social Sciences, College of Humanities, University of KwaZulu-Natal, Pietermaritzburg, South Africa

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Submitted: 6 Februrary 2019

DECLARATION

I, **Badamasi Babangida Mohammed**, declare that:

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2.	This thesis has not been submitted for any degree or examination at any other university.

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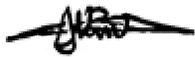
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Signed:	Date: 6 February 2019

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DEDICATION

I dedicate this work to my beloved parents, the late Malam Mamman Maska and the late Malam Rakiya Muhammad who brought me up in this world and gave me proper upbringing and other moral and financial supports for the benefits of society. May Allah reward them with Jannatul-Firdaus.

ABSTRACT

The study examined the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria. The following research questions were addressed: What are the information needs of the rural dwellers in the North-Western zone of Nigeria? What skills do rural dwellers effectively use to identify, access and use information from public libraries? What information sources and services are used by rural dwellers to seek and satisfy their information needs from the library? What channels are used by the public libraries to disseminate information to the rural dwellers? What challenges are faced by the rural dwellers in seeking and using information from public libraries? The study was underpinned by Wilson's 1981 model of information behaviour and Aina's 2006 model of library-extension service linkage. Pragmatic research paradigm and mixed methods research were employed. A sample of 427 was drawn from the library users, heads of branch libraries and directors of the state library boards. Interviews, observation and questionnaires were used to collect data. The qualitative data was analyzed using different types of content analysis one of which was thematic. The quantitative data was analyzed using descriptive statistics and SPSS computer software.

The findings revealed that the information needs of the rural dwellers revolved around agriculture, health, education, economy, government policies, rural development, culture and recreation. Among the major skills used by rural dwellers to identify, access and use information was visiting the libraries to use the information sources available. The findings also showed that the rural dwellers as well used other sources to identify access and use information beside those of the libraries. These included contacting friends, neighbours, relatives, and other people during market days, town criers, extension workers, gatekeepers, village heads, religious leaders, oral traditional healers as well as contacts through cell phones. Among the formal sources used by rural dwellers were receiving information on radio and television, visiting viewing centers and health centers/dispensaries as well as receiving information from schools/adult centers.The dominant channels/sources used in disseminating information to rural dwellers were mainly printed materials, posters and fliers, as well as other audio/visual facilities. The major challenges faced by rural dwellers in seeking information from public libraries were the centralization of the library services at the local government headquarters, absence of library services and Community Information Resource Centers in the rural communities. The study recommends that the libraries should be adequately funded to provide all the needed library and resources, facilities and services.

There should be a framework for policy review regarding the provision of the library services in rural areas. Other challenges identified included language barrier, lack of qualified library personnel and lack of basic infrastructural facilities in rural communities, as well as economic constraints among rural dwellers. The study also recommends a new approach that can be used to provide effective public library services to meet the information needs of the rural dwellers.

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

CDs	Compact Discs
CD-ROM	Compact Disc Read Only Memory
CHEWs	Community Health Extension Workers
CIC	Community Information Centre
CIRCs	Community Information Resource Centres
FAO	Food and Agricultural Organization
FCT	Federal Capital Territory
GNP	Gross National Product
ICT	Information and Communication Technology
ICTs	Information and Communication Technologies
IT	Information Technology
IFLA	International Federation of Library Associations and Institutions
L. G. A.	Local Government Area
N. A.	Native Authority
NFE	Non-Formal Education
LRCN	Librarians' Registration Council of Nigeria
MDGs	Millennium Development Goals
MLC	Mass Literacy Campaign
NCLIS	National Commission for Libraries and Information Science
NEEDS	National Economic Empowerment Strategies
NGOs	Non-Governmental Organizations
NLA	Nigerian Library Association
NLDS	National Library and Documentation Service
PLWHA	People Living With HIV and AIDS
SDI	Selective Dissemination of Information
SMEs	Small and Medium Enterprises

SPSS	Software Package for Social Science
TLSB	Tanzanian Library Service Board
TV	Television
UNECA	United Nations Economic Commission for Africa
UK	United Kingdom
UNESCO	United Nations Educational and Scientific Organization
UNICEF	United NationsInternational Children's Fund
US	United States
USA	United States of America
VEWs	Village Extension Workers
WALA	West African Library Association

OPERATIONAL DEFINITION OF KEY TERMS

The operational definitions of key terms are provided in this section as they are used in the context of this study. The concepts defined include public libraries, public library services, provision of public library services, information, information needs, rural dwellers, rural communities, and rural development.

Public libraries: The term 'public libraries' in the current study refers to libraries established in communities which ensure easy accessibility to information, knowledge, literary works, works of imagination through a wide range of resources and services to their users irrespective of their race, nationality, age, gender, religion, language, physical and mental ability, economic, employment, or educational status.

Public library services: In the current study, the term 'public library services' refers to provision of information services for sustainable development, provision of information resources in various formats, provision of adult literacy programmes, provision of mobile/outreach services, translation services, information repackaging services, lending services, reference services, circulation services, children services, serial services, public awareness services on government policies and programmes, organising meetings, seminars, workshops, and conferences for the benefits of library users.

Provision of public library services: In this study, the term 'provision of public library services' is used to refer to promoting free access to appropriate information services to all members of a community free of charge, provision of information repackaging services, provision of a wide range of information sources in various formats, provision of traditional services (such as reference, lending, children, serials and circulation services), provision of translation services, provision of adult literacy programmes, provision of information through seminars, workshops, conferences, and meetings, provision of outreach/mobile services, and provision of awareness services among others.

Information: Ifuko (2013:206) defines the term 'information' as"any message or news, viewed or read or told verbally, which adds to knowledge, awareness or understanding of topics, events, or problems that prepares an individual for the uncertainty of life", hence this definition is used and adopted in the current study.

Information needs: The term 'information needs' in this study refers to those needs that revolve around education, health, agriculture, government policies and programmes,

occupation, literacy, leisure and recreation, portable water, electricity supply, roads, transport, and other social amenities that an individual requires to improve his/her life as a member of a community.

Rural communities: Therefore, the term 'rural communities' in the current study, refers to "communities characterisedby poverty, high level of illiteracy, unemployment, subsistence economy, and lack of economic and social amenities such as roads, electricity, piped water, hospitals, banks, industries, rural telephony, etc" as defined by Ugwuanyi and Chukwuemeka (2013:56) andAnie (2014:203).

Rural development: The term 'rural development' in this study, is used to refer to the process of improving life in the rural areas in terms of literacy level, good health, economic well-being, high level of awareness, gainful employment opportunities, poverty reduction, reduction in mortality rate, recreation, good nutrition and sanitations, good roads, electricity, and good communication networks among others.

Rural dwellers: The term 'rural dwellers' in the current study is used to refer to people living in the rural areas, characterised by high rates of illiteracy, abject poverty, unavailability of basic and social amenities (such as good roads, electricity, portable water, good communication networks), lack of good health systems, and whose major occupation is subsistence farming.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Background to the study

Information is an essential tool and a basic resource used in improving the living conditions of people in any nation (Momodu 2012:91). As such, information is used to solve societal problems generally. Oyeronke (2012:66) is of the view that information is needed for economic growth and productivity; it has no substitute when it comes to national development. The development of a country depends largely on how its citizenry have access to accurate, appropriate and reliable information (Oyeronke 2012:66). It is a legitimate and fundamental human right of every citizen to have access to information (Mutula and Majinge 2016). Rural dwellers in particular, need information for the general development of their communities. As such, rural dwellers, no matter what their literacy level and locality should have access to information. According to Aboyade (1984) cited in Mtega and Ronald (2013:64) and Akanda and Roknuzzaman (2013:65), rural dwellers need information on areas that revolve around topics such as health and sanitation, education, transport, housing, legal issues, agriculture, government policies and programmes, occupation, leisure and recreation, literacy primers, maternal and childcare and basic infrastructure such as water supply, electricity and roads, employment and work opportunities.

The role of public libraries in the provision of appropriate and reliable information to rural communities cannot be overemphasized. They provide relevant, accurate, reliable and current information to members of the communities they serve. Public libraries are primarily established to provide unrestricted access to information on various spheres of life such as education, employment, health, social services, politics, economy, religion and agriculture among others(Oyovwe-Tinuoye, Omeluzorand Emeka-Ukwu 2015:2). Public libraries should serve ascenters that provide effective information servicesto rural communities (Uzuegbu 2016). Thus, public libraries are established to provide effective services to meet the information needs of rural dwellers for sustainable rural development which is an integral part of national development. Without rural development there can never be any meaningful and sustainable national development in a nation. According to Sultana (2014:27), rural development is a positive indicator of national development in any nation. In this regard, information dissemination through rural public libraries is an essential ingredient in the development of the rural communities. From the global perspective, Obinyan, Obinyan and

Aidenojie (2011) consider the issues concerning public libraries to be a world-wide phenomenon. According to them, public libraries are established in different societies, cultures and at different stages of societal development.

Provision of public library services from a global perspective: The provision of public library services is a global issue that has attracted the attention of many scholars and writers around the world. Research has been conducted theoretically and empirically to examine the provision of public library services on different foci using different methodologies. For example, in Venezuela, Correa et al. (1997) note that the rural library services are provided in a centralised system, whereby the services are coordinated by the network of state/public libraries which is integrated into the national system. In contrast to this, the situation in Cuba indicated an element of decentralization in the provision of public library services in the country. The national system of public library services in Cuba has covered the whole country including the remotest rural areas (Correa et al. 1997).

In the USA, Hildreth (2007:7) reports that there is serious concern about the viability of all types of public libraries in the USA particularly about the future of rural libraries. Hildreth (2007:7) also indicates that rural libraries are at a turning point. However, in the opinions of Swan, Grimes, and Owens (2013:9), despite the fiscal challenges and rapid technological changes faced by the public library system in the USA, provision of public library services in small and rural communities in the country has continued to evolve and serve the unique needs of their communities. This opinion drew the attention of Eberhart (2016) who stated that in the USA, the provision of public library services helps the citizens to access information which serves as a tool for education, engagement and empowerment. The major factors that fostered the development of public libraries in the USA as highlighted by Williams (2017) were education, literacy, economic ability, and industrialisation as well as urbanisation.

In England, the Department for Environment, Food and Rural Affairs (Defra) and Arts Council (2014:12) report that there is a relative scarcity of library services and facilities in the rural communities as compared to the urban centers (the rural residents haveto travel a greater distance to reach services in the urban centers). In urban areas a library is established closer to other public and private sector venues (such as schools, further education, and higher education colleges; leisure centers; theaters and cinemas; medical centers; etc.).

In Asia and other developing countries, public libraries were bedevilled with a number of challenges. For example in India, a study was carried out by Sultana (2014:27) who in his findings lamented that little attention has been given to rural public libraries in playing a role in the overall development of that country. The public libraries were generally in deplorable condition that the libraries could not provide effective services to the people (Pyati 2009). The rural librariesin particular, have not been developed to the required standard, and the principal victims of these under-developed libraries have been the rural communities, who were without any individual means of becoming literate (Sultana 2014:27). The majority of people in India as posited by Sultana (2014:27) live in remote rural areas andare illiterates. Therefore, public library development in India is hindered by low literacy, restricted access to technology, and sometimes unavailability of relevant information resources (Pyati 2009).

The situation in Malaysia is not very different from that of India. Abu (2014) has examined the role of rural public libraries in community development in Malaysia and Australia, and the major findings in his study indicates that the Malaysian rural public library services, activities, and programs are standardised and limited mostly to children, taking little account of local community information needs. The materials and other resources in these libraries are frequently out-dated, and people perceive the library services as being mainly for children. Impliedly, most of rural dwellers in Malaysia are unawareofthe public library services. However, on the contrary, Okiy (2003:126) argues that in countries such as Thailand, Singapore, the Philippines, South Korea, India, and Russia the library services in rural areas are effective in meeting the information needs of the local people and they equally accelerated sustainable rural development.

In the African context, research has also been carried out on the provision of public library services across the entire continent. For example, Issak (2000) carried out a comprehensive survey on the development of public libraries in some African countries which included Botswana, Ghana, Kenya, Nigeria, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. The findings from this survey indicated that public libraries in Africa are faced with so many challenges which have adversely affected the provision of effective services particularly in the rural areas. The challenges included poor funding, inadequate information resources, inadequate qualified personnel, and insufficient facilities coupled with limited modern technology. Other challenges were poor remuneration for librarians, and staff training and lack of good library buildings. The majority of these challenges were largely attributed to the

negligence of African governments. The governments of African countries do not give public libraries the necessary attention particularly in the rural areas. This resulted in poor provision of public library services in rural areas in the entire continent.

In South Africa, Moodley (2013) reported that public libraries in South Africa, with particular reference to Msunduzi branch libraries, were not meeting the community information needs of their users, let alone understanding the information-seeking behaviour of the users. For these reason, Salman, Mostert, and Mugwisi (2014:38) suggest that in Africa, public libraries should be charged with the responsibility of providing information services to support local business, support economic and workforce development, maintain up to date reference materials on market trends and career opportunities, using ICTs in order to connect libraries, as well as providing materials and programmes for young children, which promote literacy and learning, among others.

Provision of public library services to rural dwellers in Nigeria: In Nigeria, the provision of library services in rural areas is fraught with a number of issues, not dissimilar from other African and developing countries that have been debated by several scholars. For example, Olanrewaju (1998:4) observes that easy accessibility to appropriate information has not been ensured for rural dwellers. This is because public library services provision in rural communities is very poor or virtually non-existent, coupled with a wide literacy gap that exists between rural dwellers and their counterparts in the urban centers (Omopupa 2006:11; Ejedafiru 2015:21). Aina (2006:2) confirms that the majority of farmers in Nigeria are mainly illiterate who cannot read and write in any language. The revelation of this scenario showcased that there were high illiteracy rates among rural dwellers in Nigeria. This consequently affected the provision of public library services in the rural areas.

In Nigeria, government had planned many policies meant for rural and educational development but failed because of a lack of commitment in their implementation. Some of these policies include Education for All, Mass Literacy Campaign (MLC), Nomadic Education, Girl-Child Education, and Universal Basic Education (UBE) among others. It is against this background that Ejedafiru (2015:23) asserts that the rural communities have suffered because of being deprived of any meaningful development largely because of a policy implementation gap, artificially created by the government. This is because over the years public libraries have not been included in the implementation of government

programmes and policies aimed at meeting the economic and educational needs of the people (Agodi and Obasi 2016:54).

The provision of public library services is associated with a number of issues which must be addressed to meet the information needs of rural dwellers. For example, Kamba (2009:3) had earlier held the view that unless the rationale for which the information is needed, the user environment, channels and sources chosen for acquiring information and barriers to information seeking and use are understood; public libraries cannot provide the relevant services to meet the information needs of rural dwellers for sustainable rural development. The major challenges that have adversely affected the provision of public library services to rural dwellers in the rural areas in Nigeria as identified by Oni, Nomuoje and Oshiotse (2014:64), Igwe, Ndubusi-oko, Akuma and Okoche (2015:158) and Uzezi (2015:352) include:

    i.   Lack of information infrastructure;

    ii.   Slow internet response;

    iii.   Inadequate funding;

    iv.   Inadequate personnel;

    v.   Language barriers;

    vi.   High illiteracy level among rural dwellers;

    vii.   Lack of good access roads;

    viii.   Lack of electricity;

    ix.   Lack of pipe-borne water;

    x.   Lack of industries; and

    xi.   Lack of other social amenities in the rural areas.

Given this present situation, the current study was conducted in an environment that presents many barriers to rural dwellers and those wishing to provide professional library service.

1.2 Historical development of public library services in Nigeria

The development of public library services in Nigeria can be traced back to the 1920's when the 'Lagos book club' was formed by a number of expatriates and Nigerians (Oderinde 1980). The members of this club used to circulate books among themselves and were even successful in accessing a grant of $6,500 from the Carnegie Corporation in 1932 for the purchase of books (Olanlokun and Salisu 1985). Ezekwe (1999) and Saliu (1999) have a

contrary view on this, opining that the first proto-type public library was established in 1910 when Tom Jones established a subscription library in Lagos. Tom Jones was a colonial civil servant who donated part of his estate for the establishment of this library (Yaya, Achonna and Osisanwo 2013:13). Hence, Ezekwe (1999) and Saliu (1999) argue that it was later in 1932 that Sir Alan Burns set up what was called the Lagos Library. Later in 1946 the two libraries were merged into one and renamed the Lagos Public Library (Saliu 1999; Aguolu and Aguolu 2002). The Lagos Town Council and British Council jointly took over the library as amunicipal library (Aguolu and Aguolu 2002). The establishment of reading rooms as war propaganda outlets by the British Council in 1943 was another landmark in the development of public library services in Nigeria (Ezekwe 1999). These reading rooms eventually became public enlightenment centers for the projection of British culture after the Second World War (Ezekwe 1999). They were purposely established by the colonial masters to serve as tools for war propaganda, and not because the Colonialists hada keen interest in public library development in Africa and Nigeria in particular.

According to Olden (1985), public libraries development in Nigeria can be viewed from two different perspectives, firstly; the historical development of public libraries in Nigeria can be viewed in the lens of two time periods:pre-1967 (periods before the civil war) and post 1967 (periods after the civil war). In 1967, in its attempt to stop the spill over of the civil war, the Nigerian government abolished the then regional political system and replaced it with a federal system of government. The then three regions and the federal territory in Lagos were replaced with twelve (12) states. Under this structure, the number of public libraries increased tremendously between the 1940s and 1960s. Secondly, the development of public libraries in Nigeria in the post 1967 period could be attributed to the hard work of the professional associations, support from some government's officials and foreign aid. In summary, Oderinde (1980) highlighted the following as events that led to public library development in Nigeria:

i. The efforts of some individuals by donatingtheir private buildings and collections for public use. These buildings and collections later formed the nucleus of public library services in Nigeria;

ii. The establishment of reading rooms in the three regions (northern, western and eastern) by colonialists which were later changed into public libraries;

iii. The Second World War also fostered public library development for dissemination of (war) information;

iv.   The establishment of regional governments and subsequent states creation; and

v.   Mass enrolment of students in schools.

The seminar organised by UNESCO in 1953, held in Ibadan, was believed to have laid the foundation for the development of libraries and librarianship not only in Nigeria but in the entire African continent (Aguolu and Aguolu 2002). The absence of library legislation in most African states was identified as one of the major obstacles to African library development during that seminar (Aguolu and Aguolu 2002). The first public library to be established after the seminar was the Enugu public library. The establishment of this library was backed by the Eastern Regional Library Act promulgated in 1955, which served as a model, funded by UNESCO and expected to be adopted by other African countries throughout the continent. The subsequent creation of states by successive governments in Nigeria increased the number of public libraries throughout the federation.

1.3 Site of the study

Nigeria came into being in 1914 when the northern and southern protectorates were amalgamated under the governorship of Sir Fredrick Lugard (Udo 1970:1). Nigeria became independent in 1960, after more than half a century of British rule (Udo 1970:1). Geographically, from the northern border, Nigeria's neighbour is the Niger Republic; from the eastitsneighbor is Cameroon Republic and from the west, itshares a border with Benin Republic. The country has hundreds of ethnic groups (Falola and Heaton 2008:18). The Hausa, Fulani and Kanuri are identified as the major ethnic groups in the northern part of Nigeria (Langer and Ukiwo 2008:9). The major ethnic groups in the southern part are Yoruba, Igbo, and Ijaw (Oladipo, Olabiyi, Oremosu, and Noronha 2007:20). Today Nigeria has people from different indigenous languages, historical memories, traditional lifestyles, and social frameworks with roots reaching into the distant past (Falola and Heaton 2008:18). There are three major ethnic groups in Nigeria as a whole which include: Hausa, Yoruba, and Igbo. The Yoruba and Igbo live in an area that lacks cattle-raising, while the Hausa and Fulani live in the northern part where cattle-raising and ingestion of milk products are traditional activities (Kretchmer, et al. 1971:392).
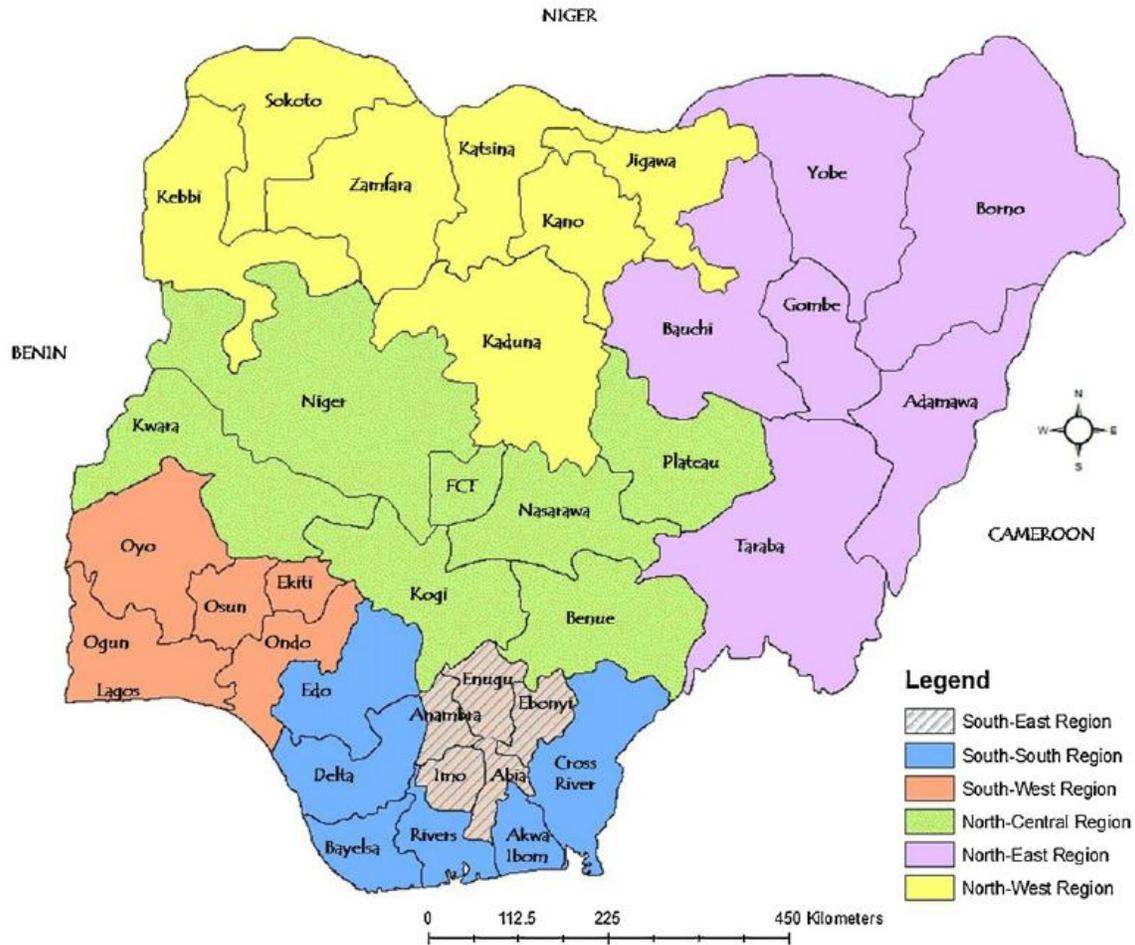
Figure: 1.3 Map of Nigeria showing site of the study

(Source: Ekong, Ducheyne, Carpenter, Owolodun, Oladokun, Lombin and Berkvens 2012:171)

Figure 1.3 above indicates that the geopolitical formation of the Nigerian state is made up of six geopolitical zones, namely the North-West, North-East, North-Central, South-South, South-East, and South-West (Ekong et al.2012: 171; Emojorho 2011). The South-Eastern geopolitical zone comprises states which include Enugu, Ebonyi, Anambra, Imo, and Abia. The South-South geopolitical zone comprises Edo, Delta, Bayelsa, Rivers, Cross River, and Akwa Ibom states. The South-Western zone has Oyo, Ekiti, Osun, Ondo, Ogun, and Lagos states. The North-Central zone comprises states which include Benue, Niger, Kogi, Nasarawa, Plateau, Kwara, and FCT. The North-Eastern zone has Borno, Yobe, Bauchi, Gombe, Adamawa, and Taraba states. Finally, the North-Western zone, which is the site of this study, has seven states which comprise Kaduna, Kano, Sokoto, Katsina, Jigawa, Kebbi,

and Zamfara. According to Yahaya (2002:419), the North-Western zone of Nigeria is neighbouring with Niger Republic from the north and Benin Republic from the west. Nigeria lies between longitudes eleven degrees, thirteen degrees East and latitude four degrees to six degrees north. In terms of climate and vegetation, it is within the Savannah belt. The rainfall (wet-season) starts between April and June and ends around October when the dry season sets in (Yahaya 2002:419). Salman, Mostert, and Mugwisi (2013:4) established that in Nigeria there are thirty-six (36) public library boards across the six geo-political zones. These libraries are serving a population of not fewer than 160 million people and supervising a number of community/local government public libraries, but the services are still grossly inadequate in relation to the country's population size.

1.4 Statement of the problem

Public library services are considered indispensable institutions for societal development. Public libraries are established to provide relevant, accurate, reliable and current information to members of the communities they serve. In other words, they are primarily established to provide unrestricted access to information on various spheres of life such as education, employment, health, social services, politics, economy, religion and agriculture among others (Oyovwe-Tinuoye, Omeluzorand Emeka-Ukwu 2015:2).

However, for public libraries to provide relevant information for sustainable development in the communities they serve, they need to articulate and understand the purpose for which information is required by their users, the environment in which their users operate, the preferred sources and channels for acquiring and disseminating the information, as well as barriers to information seeking and use by the users (Kamba2009:3). In line with this, Ejedafiru (2015a:23) opines that access to information in rural communities is affected largely by a number of barriers such as the lack of basic infrastructure, low levels of literacy, the lack of adequate and relevant information resources and services, as well as the absence of literacy programmes. The revelation of these scenarios reports that there exists a problem worthy of investigation through empirical studies.

It is against this background that this study was embarked upon to investigate the provision of public library services with respect to the North-Western zone of Nigeria which has been not captured by the previous studies. This was to find out whether or not the services provided by public libraries in the zone meet the information needs of rural dwellers for sustainable rural

development. It was also to recommend an approach/model to be adopted by the libraries for the provision of effective services to rural dwellers.

1.5 Research objectives

This study is therefore, specifically designed to achieve the following objectives, with respect to the North-Western zone of Nigeria:

1. To determine the information needs of the rural dwellers.

2. To identify the skills rural dwellers use to effectively identify, access and use information from public libraries.

3. To identify the information sources and services used by rural dwellers to seek and satisfy their information needs from public libraries.

4. To determine the channels used by the public libraries to disseminate information to the rural dwellers.

5. To identify the challenges faced by the rural dwellers in seeking and using information from public libraries.

1.6 Research questions

This study is therefore, specifically designed to find answers to the following questions, with respect to the North-Western zone of Nigeria:

1. What are the information needs of the rural dwellers?
2. What skills do rural dwellers use to effectively identify, access and use information from public libraries?
3. What information sources and services are used by rural dwellers to seek and satisfy their information needs from public libraries?
4. What channels are used by the public libraries to disseminate information to rural dwellers?
5. What challenges are faced by rural dwellers in seeking and using information from public libraries?

Table 1.6.1: Link between research objectives, questions, methods

S/N	Research Objectives	Research Questions	Research Methods
1.	To determine the information needs of the rural dwellers in the North-Western zone of Nigeria.	What are the information needs of the rural dwellers in the North-Western zone of Nigeria?	Questionnaire -heads of branch public libraries; and Questionnaires -library users.
2.	To identify the skills rural dwellers use to effectively identify, access and use information from public libraries.	What skills do rural dwellers effectively use to identify, access and use information from public libraries?	Questionnaires -library users.
3.	To identify the information sources and services used by rural dwellers to seek and satisfy their information needs from the library.	What information sources and services used by rural dwellers to seek and satisfy their information needs from the library?	Interviews -directors; Questionnaires -library users; Questionnaires -heads of branch libraries; and Observation –researcher.
4.	To determine the channels used by the public libraries to disseminate information to the rural dwellers.	What channels are used by the public libraries to disseminate information to the rural dwellers?	Questionnaire -heads of branch libraries.
5.	To identify the challenges faced by the rural dwellers in seeking and using information from public libraries.	What challenges are faced by the rural dwellers in seeking and using information from public libraries?	Questionnaires -library users.

1.7 Methodology

This study used mixed methods research. It was guided and underpinned by a pragmatic approach. Pragmatism is an approach that applies to mixed methods research, where inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research (Creswell 2013:39). Similarly, exploratory sequential mixed methods design was adopted in this study. In an exploratory sequential approach the researcher first begins with a qualitative research phase, the data were then analyzed and the information was used to build a second quantitative phase (Creswell 2013:44).

The targeted population of this study consisted of three groups. The first group consisted of five directors of state library boards in the North-Western zone of Nigeria. The second group

comprised of 52 heads of branch/public libraries in the local government areas in the zone. The third group consisted of 10 574 registered library users. Thus, a total of 427 participants were drawn from the study population to form the sample size for the study.

The research instruments employed for data collection in the current study were interviews, observation and questionnaires. A pre-test was carried out to ensure the validity and reliability of the research instruments used for the study. Thematic and Content analysis using NVivo software were employed to analyze the qualitative data collected. Similarly, descriptive statistical analysis using Statistical Package for Social Science (SPSS) software was also used to analyze the quantitative data collected. Further details about the research methodology used in this study are explored and discussed in Chapter Four.

1.8 Assumptions of the study

The study makes the following assumptions that:

1. The provision of public library services to rural dwellers with respect to the North-Western zone of Nigeria would not be different from those of other zones of the country and the entire African continent as reported in most of the literature reviewed.

2. The library services provided to rural dwellers in the North-Western zone of Nigeria may not be effective or sufficientto meet the information needs of the rural dwellers.

3. Rural library services with respect to the North-Western zone of Nigeria might not be backed by effective library laws and policies.

1.9 Scope and limitations of the study

This research focused on the provision of public library services to meet the information needs rural dwellers with respect to North-Western zone of Nigeria for sustainable rural development. The study does not cover the urban dwellers in the area under study. Because of the size of Nigeria, time and other resource constraints, the research did not cover public library services in the remaining five (5) geo-political zones of Nigeria. The other five (5) geopolitical zones that this study didnot cover were the North-East; North-Central; South-West; South-South; and South-East. Similarly, the study covered only the provision of public library services in the local government areas because they are primarily established to cater for the information needs of rural communities. The research did not cover public library

services provision in the urban centers. Another limitation of the study is that it did not cover the services of academic, school, special, and national libraries, but was limited to public library services alone. These limitations were necessitated by the wide geographical area of Nigeria, time and other resource constraints and the desire to focus on rural library provision.

1.10 Significance of the study

1. The study serves as a tool for authorities of public libraries in the North-Western zone of Nigeria to develop policies that would facilitate the provision of effective services that can meet the information needs of the rural dwellers for sustainable rural development.

2. The study contributes to knowledge in the field of library and information science about library practice.

3. The study could be used to improve the provision of public library services for sustainable rural development in the North-Western zone, and Nigeria in general.

4. The study serves as a tool in publicising public library services to rural dwellers.

5. The study recommends a new approach that will revitalise the services, since development is only attainable when rural dwellers have access to right and accurate information relevant to their needs for effective use.

1.11 Theoretical framework

This study was guided by the Aina's 2006 Library – Extension Service Linkage Model and Wilson's 1981 Information Behaviour Model**.** The Wilson's 1981 model and Aina's model (2006) were both found to be useful in addressing the research questions of this study. Aina's 2006 model was designed mainly for the provision of information to illiterate rural farmers who cannot read and write in any language. The model involves a triangular linkage between farmers, extension agencies, and public libraries.The model suggests that public libraries are expected to redesign and repackage their information sources and services and tailor them to languages and formats accessible to rural farmers. On the other hand, Wilson's 1981 model suggests that information-seeking behaviour arises as a result of a need perceived by an information user, who, in order to satisfy that need, makes demands upon formal or informal information sources or services. The two models were found to be adequate in the current

study in addressing the research questions. In other words, they guided the current study in addressing issues relating to information needs; information seeking behaviour, information sources and services, channels used in disseminating information, as well as the challenges faced by rural dwellers in seeking and using information from public libraries in the area under study. The detailed theoretical framework is discussed in Chapter Two of the current study.

1.12 Outline of the study

This thesis is divided into seven chapters:

Chapter 1: This introductory chapter covers background of the study which contextualises issues relating to the provision of public library services from the global perspective down to the Nigerian perspective. The chapter also covers historical development of public library services in Nigeria,describes the site of the study, statement of the problem, research objectives, presents research questions, assumptions of the study, scope and limitation of the study, significance of the study and outline of the study.

Chapter 2: This chapter presents a discourse on conceptual and theoretical frameworks and review of key contending models relevant to the study. Additionally, rational for the chosen models was presentented.

Chapter 3: This chapter provides the review of related literature. The chapter presents a comprehensive review of the existing literature that covers the research questions used in this study. The literature discussed in the chapter includes information needs of rural dwellers, skills used by rural dwellers to access to and use information, information sources and services, information channels used in disseminating information to rural dwellers and challenges faced by rural dwellers in seeking and using information. Other topics also discussed in the chapter include issues involved in the provision of public library services in Nigeria and the problems associated with the provision of public library services in rural areas.

Chapter 4: This chapter discusses paradigm of research, research design and methodology, population, sampling, methods of data collection and data analysis techniques and validity and reliability of the research instruments used for data collection. This is followed by a discussion of the ethical considerations and evaluation of the methodology of the study.

Chapter 5: This chapter presents the data analysis and interpretation of results.

Chapter 6: This chapter discusses the findings presented in chapter five and addresses the specific objectives of the research.

Chapter 7: This chapter concludes the study by summarising the findings. The chapter also covers conclusion and recommendations. The chapter recommends the new approach, dicusses contribution of the study, the implication of the study, and indicates areas for further research.

1.13 Summary

This chapter provided the context of the studyby discussing issues relating to the provision of public library services in rural areas from the global perspective and specifically to the Nigerian context. The chapter outlined the historical development of public library services in Nigeria, site of the study, statement of the problem, research objectives, research questions, and the table mapping the relationship between research questions, research objectives, as well as methodology. The chapter also outlined the assumptions of the study, scope and limitations of the study, significance of the study, theoretical framework and outline of the study. The key issue that emerged in this chapter is that the provision of public library services in rural areas is a key to the development of not only the rural communities but the nation in general. However, the previous studies reviewed show that there is a similarity between Asian and African countries in terms of public library services and rural information needs. Public libraries in most developing countries do not receive the necessary attention from their governments and as such they are bedeviled by a number of challenges.

It is evident that the provision of public library services in rural communities is very poor to the extent that the services do not meet the information needs of rural people despite the fact that the majority of the population in Africa is living in the rural areas. This scenario was attributed to so many factors such as lack of effective information infrastructural facilities in the rural areas, high illiteracy levels among the rural dwellers, and the concentration of public library services in urban areas neglecting the rural areas. Other factors were lack of effective and clear library policies for rural services, outdated information resources and ineffective services for rural dwellers, among others.

Based on the review of the few related works above, it is absolutely clear that there is also unavailability of empirical research on the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria. These existing knowledge gaps in the literature have been addressed by the current study through the research questions using mixed methods approach. Chapter Two discusses the theoretical framework for the current study.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Introduction

The theoretical framework or conceptual framework is an important segment in any research work. The theoretical and conceptual frameworks are two terms that researchers often use in their studies without clarifying their meaning, explaining their differences, or even clearly justifying the reason for using them in studies (Ngulube, Mathipa and Gumbo 2015:44). Green (2014) confirmed that theoretical and conceptual frameworks are terms that are regularly used in research but rarely explained by the researchers. Green (2014) emphasised that the two terms need to be understood and clarified for novice researchers. The two terms are therefore laden with confusion and debate which need to be clarified.

The theoretical framework is referred to as that part of a research proposal or study that begins to explain the research question/hypothesis as well as the research pattern and methodology used to answer it (Ocholla and Le Roux 2011). Abbas (2015:41) asserted that a theoretical framework formed the defined concepts and existing theory/theories used in a particular study. Grant and Osanloo (2014:13) explained that the theoretical framework involves a selected theory (or theories) that undergirds and guides the researcher on the pattern he/she plans to use in carrying out a studyon a particular topic. It also enables the researcher to define the concepts used in the research from theoretical point of view.

According to Jabareen (2009:51), the conceptual framework is a network that connects concepts together to provide a complete understanding of a phenomenon or phenomena. Jabareen (2009:51) added that the conceptual framework shouldnot be seen as merely a collection of concepts, but, rather, a construct in which each concept plays an integral role. In most cases researchers use conceptual frameworks in qualitative research and mixed methods research in place of theoretical frameworks which are mostly attracted by quantitative and mixed methods researchers (Ngulube et al. 2015:59). Jabareen (2009:51) cited in (Ngulube et al. 2015:47) asserted that the conceptual frameworks enable researchers to understand the phenomena they are investigating unlike the theoretical framework which provides theoretical explanation. In other words, the conceptual frameworks are based on understanding of the phenomena being investigated while theoretical frameworks are based on explanation or prediction. In this regard, Smyth (2004) confirmed that a conceptual

framework is a research tool that assists researchers in developing awareness and understanding of phenomena under investigation.

In the current study which is a mixed methods research, a conceptual framework was used. It is an approach that combines both qualitative and quantitative procedure (Creswell 2009:4). In this study, the conceptual framework enabled the researcher to understand whether or not the provision of public library services meets the information needs of rural dwellers in the North-Western zone of Nigeria. The rationale for using conceptual framework in the current study was that the study was guided by models in place of theories. Even though the two terms 'models' and 'theories' are sometimes used by some researchers interchangeably which is conceptually incorrect. Ngulube et al. (2015:45) posit that "models are the main direction that leads researchers to conceptual frameworks, while theories resulted in theoretical frameworks.

According to Creswell (2013), a theory in a research study could be in a form of argument, a discussion, a figure or a rationale that helps to explain (or predict) phenomena.Creswell (2013:86) added thata theory in quantitative researchis considered being a set of constructs (or variables) that have interrelationship in the formation of propositions or hypotheses. However, in qualitative research, a theory is used in different ways to broadly explain the behaviour and attitudes which could be complete with variables, constructs and hypotheses (Creswell 2013:98). In mixed methods research, theories guide the researcher on the types of questions he/she needs to ask, as well as who need to be the participants in the study (Creswell 2009:235). In mixed methods research theories are used to shape the types of research questions asked and the individuals participated in the study (Creswell 2009:235). In this regard, theories shaped the types of questions asked in the current study, which in turn determined the groups of participants involved in the study. In addition, theories helped the researcher to understand and explain issues relating to how rural dwellers identify, access and use information relevant to their needs from public libraries in the study area.

According to Ngulube et al. (2015:46), a model describes a phenomenon under investigation and embodies a theory. Manyerere (2015:26) concurred that a model is used to develop a theory. Therefore, the main difference between the two terms is that, theories have the power to explain and predict outcome, while models just describe the phenomenon (Ngulube et al. 2015:46). In this regard, the models reviewed in the current study were found to be helpful in investigating the provision of public library services to meet the information needs of rural

dwellers in the study area. Therefore, the variables/constructs of the models guided the researcher to address the specific objectives of the current study and the relationships between the variables of the models reviewed and the specific objectives of the current study are shown in the data matrix in Table 2.2.

2.2 Review of the key contending models relevant to the study

In the current study, some relevant models were reviewed and discussed in order to address the research questions. The current study found that in various studies models and theories of information behaviour have been developed and used. However, this chapter has attempted to discuss the few selected models that are most relevant to the objectives of this study. The chapter discusses Aina's 2006 library-extension service linkage model as well as seven other models of information-seeking behaviour for a better understanding of the major concepts in this study. These include: Wilson's 1981 (Wilson 1981) model of information behaviour (Wilson 1981); Wilson's second or revised 1981 model of information-seeking behaviour (Wilson 1981); Wilson's 1996 model of information behaviour (Wilson 1997); Wilson's 1999 nested model of the information seeking and information searching research areas (Wilson 1999); Williamson's 1998 model of information seeking and use (Williamson 1998); the 1996 model of Leckie et al.which is a general model of information seeking of professionals (Leckie et al.1996) and Ellis's (1989) behavioural model (Ellis 1989).

Aina's 2006 library-extension service linkage model: The library-extension service linkage model by Aina (2006) is designed mainly for understanding illiterate farmers in the rural areas who cannot read or write in any language (Aina 2006). The model was found to be useful in the current study, because the rural dwellers share common characteristics with rural farmers in terms of information needs, literacy levels and to some extent locality. With this model, public libraries can redesign and repackage their information sources and services to ensure their accessibility to farmers. In this regard, the model suggests the establishment of Community Information Resources Centres (CIRCs) for effective provision of information to rural farmers. The centres will collect all kinds of information materials and made them accessible to rural farmers in languages and formats they understand (Aina 2006).

The model suggests a triangular linkage between farmers, extension agencies, and public libraries in the provision of agricultural information to rural farmers. It is expected that the

CIRCs in the rural communities are expected to provide information directly to farmers and extension agents as shown in Figure 2.2.1 below:
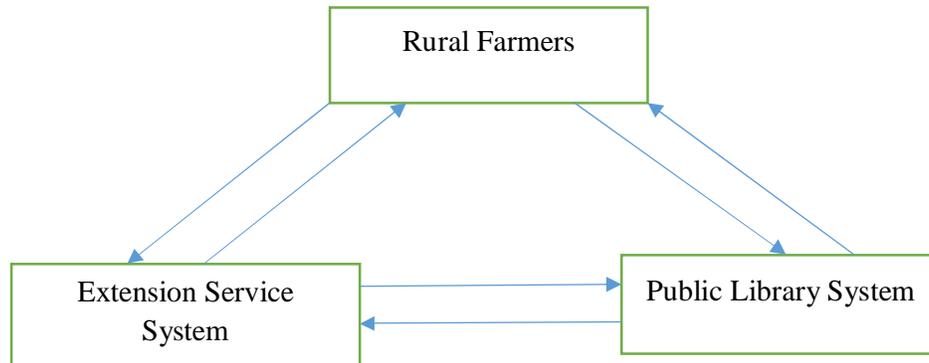
Figure 2.2.1: The library-extension service linkage model

(Source: Aina 2006)

Figure 2.2.1 above shows that the farmers and libraries will receive agricultural information directly from extension agents as the farmers will be able to forward their information needs to the library and extension agencies. Information materials, such as audio and video-cassettes/DVDs, audio and video-record players, films, projectors, posters and leaflets on agriculture are expected to be collected and made available to rural farmers. The public library and extension agents would engage the services ofinformation gatekeepers among the rural farmers who will be the first point of contact for the farmers when they experience problems relating to their farming activiteis (Aina 2006). The library will supply the gatekeepers with agricultural information on a regular basis. According to Aina (2006), the gatekeeper could be a retired civil servant, teacher or any revered personality who is always available in the rural community.

2.2 Wilson's 1981 information behaviour model: According to Wilson (1981:4), the model (presented in Figure 2.3.1 below) suggests that information-seeking behaviour arises from the recognition of a need perceived by an information user. In this regard, the information user seeks information from formal sources (such as libraries, information centres, offices among others) or from informal sources (from other people) in order to satisfy that need. However, the model demonstrates that the information seeking behaviour of the user may result in success or failure. The user will fully or partially satisfy the perceived need if s/he is successful in obtaining the relevant information.But, if the information obtained fails to satisfy the user's need, then the search process has to be repeated (Wilson 1999:251).

Wilson's 1981 model also demonstrates that part of the information behaviour may include other individuals through the exchange and transfer of information by the use of appropriate channels. In this regard, the information perceived as useful may be used by the information user and passed on to other people who may be in need of it (Wilson 1999:251). Figure 2.3.1 below explains the information seeking behaviour of an information user.

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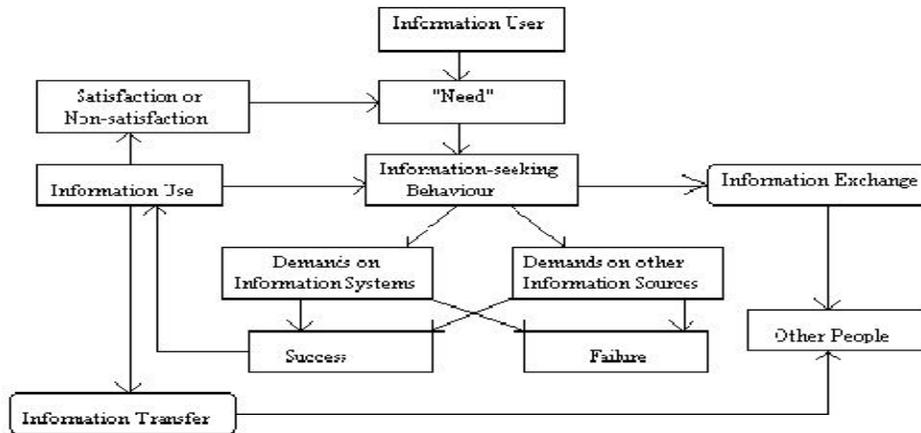
Figure 2.2.2: Wilson's (1981) information behaviour model

(Source: Wilson 1981)

Figure 2.2.2 above suggests that Wilson's 1981 model of information behaviour was adequate in addressing all the research questions in the current study. The basic and relevant constructs in the model that guided the current study in addressing the research questions include:

  i.   Information need;
 ii.   Information-seeking behaviour;
iii.   Information use;
 iv.   Information sources and services; and
  v.   Information transfer and exchange.

Wilson's 1981 second information seeking behaviour model: According to Wilson (1981), the information seeker may engage in information-seeking behaviour as result of a search for the satisfaction of basic needs. Wilson's second model of 1981 is based upon two main propositions: first, that the information need of the user is not a primary need, but a secondary need arising from those basic needs; and second, that in his/her effort to obtain information to

satisfy the basic needs, the information seeker is likely to meet with different barriers (Wilson 1999:252). Psychologically, Wilson proposed that a basic need can be defined as physiological, cognitive or affective (Wilson 1981:6). These needs are interrelated with one another. A physiological need may cause affective and/or cognitive needs; affective needs may cause cognitive needs and may result in affective needs (Wilson 1981:6). Wilson (1981) noted that the contexts of these human needs may be the information seeker, or the role demand of his/her work or life, or the surrounding environments within which that life or work take place. Barriers that impede the information searching will come up from the same set of contexts (Wilson 1999). The model demonstrates how the information need of a user arises and the barriers likely to impede the actual information searching. Wilson (1999:252) remarked that the model represents implicitly, a set of hypotheses about information behaviour that can be tested, in such a way that information needs in different work roles will be different, or that personal traits of the information seeker may hinder or facilitate information seeking.
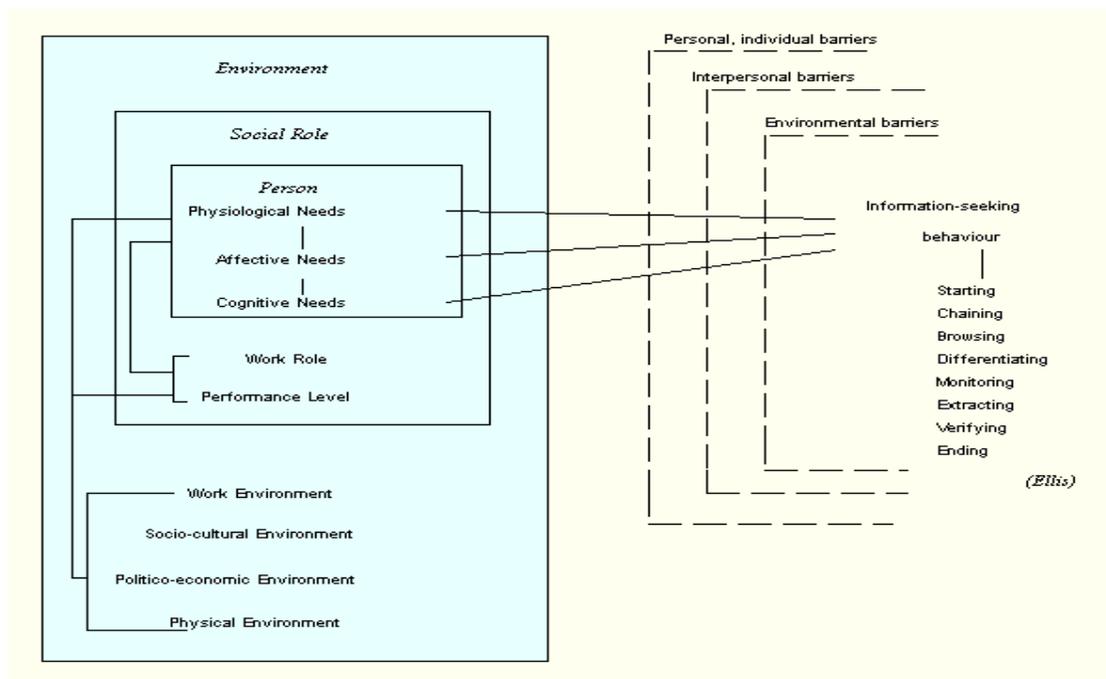
Figure 2.2.3: Wilson's 1981 second information-seeking behaviour model

(Source: Wilson 1981)

Figure 2.2.3 above shows that Wilson's 1981 second model focuses more on the information needs of a user which revolve around the environment, social setting and the person himself

or herself. The model also describes the barriers that the information seeker is likely to encounter while seeking information. The barriers could be personal, interpersonal or environment related. However, the model did not explain in detail how people specifically look for information (Reddy 2003:18). Though Wilson attempted to expand the first model by including the much more complex nature of human information behaviour in this revised model, only one component of information seeking is explained (Reddy 2003:18). Wilson marries Ellis's eight (8) characteristics of human behaviour in information seeking in order to assist the information seeker in overcoming barriers that impede the search process.

In the current study, Wilson's 1981 second model was found to be helpful in addressing research questions relating to the information needs of rural dwellers and the challenges (barriers) they face in seeking and using information from the public libraries. The major weaknesses of this model for the current study, are that it does not address issues relating to the skills that rural dwellers can effectively use to identify, access and use information; it does not specifically suggest information sources and services to be used by rural dwellers to satisfy their information needs; nor are the channels to be used in disseminating information to the rural dwellers clearly defined.

These weaknesses were also identified in a similar study carried out by Manyerere (2015:31) on 'Information behaviour of rural women in the context of Tanzania. Manyerere (2015) observed that Wilson's second model of 1981 is inadequate on issues relating to the channels used by the rural women in sharing information; the resources that can be used to seek and satisfy their information needs; and the basic skills they need to effectively identify and access information. Another weakness of this model as identified by Manyerere (2015:31) and Aydin (2017:4) is that the model describes a totality of hypotheses on information behaviour which is not directly expressed. This makes hypotheses to be only implicit rather than explicit. In addition, Wilson (1999:252) observed that the model lacks anysign of process whereby context has effect on the individual's information seeking behaviour, or even the factors that result in his perception of the barriers, and there is no clear indication as to whether those barriers are similar or different in terms of effects upon the motivation of individuals to seek information.

Wilson's 1996 information seeking behaviour model: According to Wilson (1999:256), his 1996 model emerged as a major revision of those of 1981. In other words, the model is based on structure of the 1981 models, where the information user in context is often the focal point

of the information needs, the barriers are presented by the intervening variables, and the information-seeking behaviour identified. In this model, Wilson has drawn upon research from a various fields such as decision making, psychology, innovation and health communication and consumer research (Preez 2008:38). The model demonstrates that the exploration of these disciplines may be productive of research ideas for the information science researcher (Wilson 1997:570). Aydin (2017: 4) has identified two (2) basic constructs from the model which include information-seeking and information processing (as feedback loop). This model was proposed as a problem solving model by incorporating the research in the field of information seeking behaviour (Wilson 2000:53). Information seeking, searching and use were perceived to be parts of the different stages of goal directed problem-solving process. These stages involve problem recognition, problem definition, problem resolution and solution statement (Wilson 2000:53).
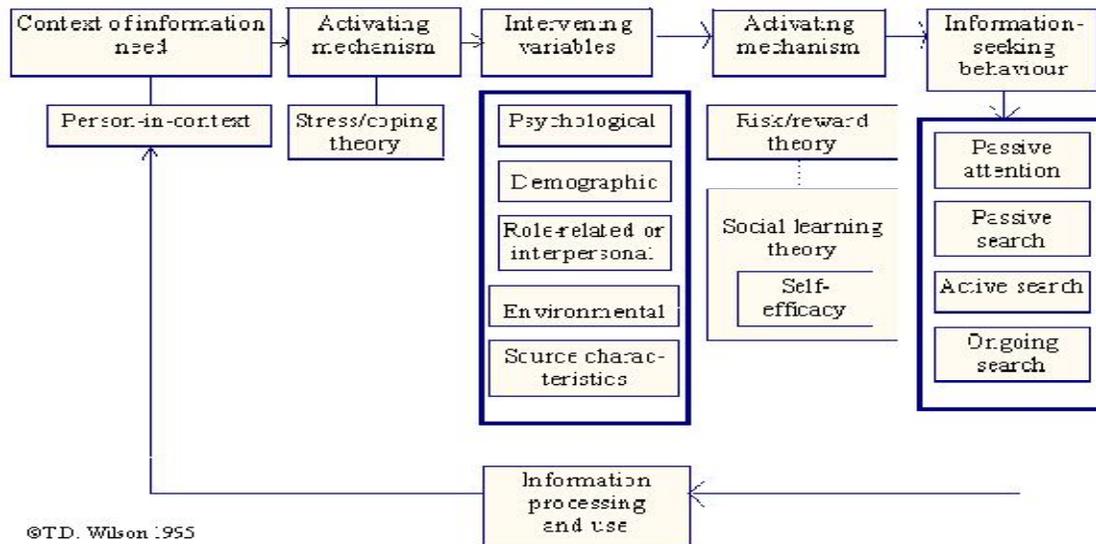
Figure 2.2.4: Wilson's 1996 information-seeking behaviour model

(Source: Wilson 1997)

Figure 2.2.4 above indicates that in this model there are some degrees of integration of different models. The major changes in this model that could be identified from the earlier model are the use of the term 'intervening variables' which may be supportive or preventive of information use. The intervening variables may be physiological, demographic, role-related (interpersonal), environment or source characteristics. The model emerges as a result of recognising the need to involve an activating mechanism where stress/coping strategy is applied (Wilson 1997). There is also a need to involve an activating mechanism between the

individual in context and information-seeking action where risk/reward theory helps to explain the information sources mostly usedby a given individual, as well as social learning theory which represents the concept of 'self-efficacy' (Wilson 1999; Aydin 2017:4). According to this model, the information seeking behaviour of an individual may attract passive attention, passive search, active search or ongoing search.

In the current study, Wilson's 1996 model of information behaviour was found to be relevant in investigating the information needs of the rural dwellers. It was also found to be relevant in investigating the information behaviour of rural dwellers around issues relating to the skills they need to apply in identifying, accessing and using information. The model is also adequate in addressing the issue relating to the information sources to be used by rural dwellers to satisfy their information needs. However, the model was found to be inadequate in addressing issues relating to the channels to be used in disseminating information to rural dwellers, as well as the challenges that are likely to be encountered by the rural dwellers while seeking and using information. Manyerere (2015:33) posited that Wilson's 1996 information behaviour model is based on other disciplines such as decision making; health communication; consumer research as well as psychology and innovation, rather than information science.

Wilson's 1999 nested model of information seeking and information searching research areas: According to Wilson (1999:263), the nested model of information seeking and information searching suggests that information-seeking behaviour of an individual consists of various ways that information seekers use to discover and gain access to information. The model also describes information searching as a sub-set of information seeking where the information user interacts with computer-based information system without any intermediary. The 1999 nested model of Wilson also demonstrates that information behaviour is an integral part of human communication behaviour. Wilson's 1999 nested model is also discussed by Aydin (2017: 6) who asserted that this nested model was the result of the mixture of Ellis's (1989) model and Kuhlthau's (1991) models. It demonstrates that the field of information behaviour is broad and it encompasses sub-areas (Greifeneder 2014).

Stokes (2013:33) in his study, asserts that the model demonstrated the significant relationship between information behaviour, information seeking behaviour and information searching behaviour. Stokes (2013:33) describes information behaviour as the umbrella term that encompasses information seeking behaviour (the method used to access information sources)

as well as information searching behaviour. The model compared information behaviour to an onion, containing three layers: the inner layer which is concerned with information search behaviour, which is referred to as information retrieval or interactive information retrieval; the middle layer which concerns the information seeking behaviour of an individual while searching for the information; and the outer layer which is the all-encompassing layer, which is to do with information behaviour that embraces all kinds of human interactions with information (Greifeneder 2014).

Figure 2.2.5: Wilson's 1999 nested model of information seeking and information searching research areas

(Source: Wilson 1999)

In the current study, this model was found to be helpful in investigating the information behaviour of rural dwellers on issues relating to the skills they employ to access the relevant sources of information as well as the relevant sources that can be used to satisfy those needs. However, the model was found to be inadequate in addressing issues relating to how the information needs of a typical rural dweller could be identified. It also lacks the constructs to be used in addressing issues relating to the channels used in disseminating information to the rural dwellers, as well as how the challenges that are faced by the rural dwellers in seeking and using information could be addressed.

Williamson's 1998 model of information seeking and use: Williamson's 1998 model of information seeking and use emerged from the observation that the role of information which is acquired incidentally or accidentally has been neglected in the study of information-seeking behaviour (Williamson 1998). The focus of this model was on 'incidental information acquisition'. Williamson (1998) developed this model from a study investigating

information behaviour of older people and everyday life in the context of Australia. The study involved 202 older adults, from the age of 60 years and above. The study was carried out using an ecological method to study the information seeking behaviour of older people. According to Williamson (1998), an individual acquires information either incidentally or purposely through his/her association with friends, relatives or even colleagues with whom s/he exchanges news and views regularly. Williamson (1998) added that information is also acquired in patterned activities such as reading, watching or listening to public vehicle of communication (newspapers, television, radio, magazines and books).

Williamson's 1998 model of information seeking and use encompasses information seeking, information acquisition and information use within the context of variables which may influence an individual's information behaviour (Williamson 1998:35). The model as reviewed by Manyerere (2015:40), demonstrates that while individuals purposely seek information in relation to their perceived needs, they are also watchful as to what is going on around them, and to some extent, they incidentally acquire information which they were often unaware that they needed. This occurred in an intimate set of personal networks of the individual with other sources (clubs, churches, and revolutionary organisations), as well as the mass media (newspaper, television, radio, and magazines). In these personal networks both purposeful information seeking and incidental information acquisition took place. However, the purposeful information seeking occurs in institutionalised sources of information (professionals, government departments, other organisations, citizens' advice bureaus, and libraries). In this regard, Manyerere (2015:40) recommends that this model would be helpful for researchers to be able to take account of individual or group information behaviour, biological and social situations in an investigation.

In the current study, Williamson's 1998 model of information seeking and use was found to be relevant in investigating the information needs of rural dwellers, as well as the skills they use in identifying, accessing and using information. The model is also adequate for addressing issues regarding information sources that can satisfy the information needs of rural dwellers, as well as the appropriate channels to be used in information dissemination to rural dwellers. However, the model was found to be inadequate in investigating the challenges faced by rural dwellers in seeking and using information from public libraries.

Leckie's et al. 1996 general model of information-seeking of professionals: According to Leckieet al. (1996), their general model of information-seeking of professionals demonstrates

how individuals from different professions look for and use information in their jobs. The model also suggests that the understanding of why, how, and when information seeking may occur depends largely on individuals' roles and associated tasks that are understood thoroughly in an organisation. Leckieet al. (1996) reached the conclusion that with this model; information seeking and information related works were almost the same across different professions than ever thought of. The model according to them, assumes that in the context of every work position there are some specific roles and tasks that take place. The individual's information needs depending on his/her status in the organisation, experience and specialisation is shaped by certain factors which facilitate the information-seeking process (that is, characteristics of information need). These factors are important in the eventual success or failure of the information-seeking event including all the potential information sources and whether the individual is aware of these sources and their usefulness. The consequences of the information seeking event will be an outcome, which will either be moving the work forward, or will require further information seeking for greater clarification (through the feed-back loop).

The Leckie'set al.1996 model has been discussed and reviewed in various empirical studies. For example, Robson and Robinson (2013:5) asserted that the model was proposed to be a general model of information-seeking behaviour which is applicable to all professions. The model was developed on the basis of the review of research into information-seeking behaviour by three professional groups which included engineers; healthcare professionals (nurses, physicians, and dentists); and lawyers (Robson and Robinson 2013:5). The main discourse of this model is that it was to accommodate the information needs of these professionals in relation to their roles and tasks in an organisation (Aydin 2017: 6). Kerins, Madden and Fulton (2004) posited that the model was proposed believing that information seeking is related to a particular role and its associated tasks. Therefore, information needs emanated from these roles and their related tasks which are considered the variables that turn into information needs. These needs are influenced by factors such as sources available, purpose of using thesources, user characteristics, and the user environment (Kerins et al. 2004). According to Aydin (2017:3), these roles and related tasks done by professionals turn into information needs and subsequently to information seeking.
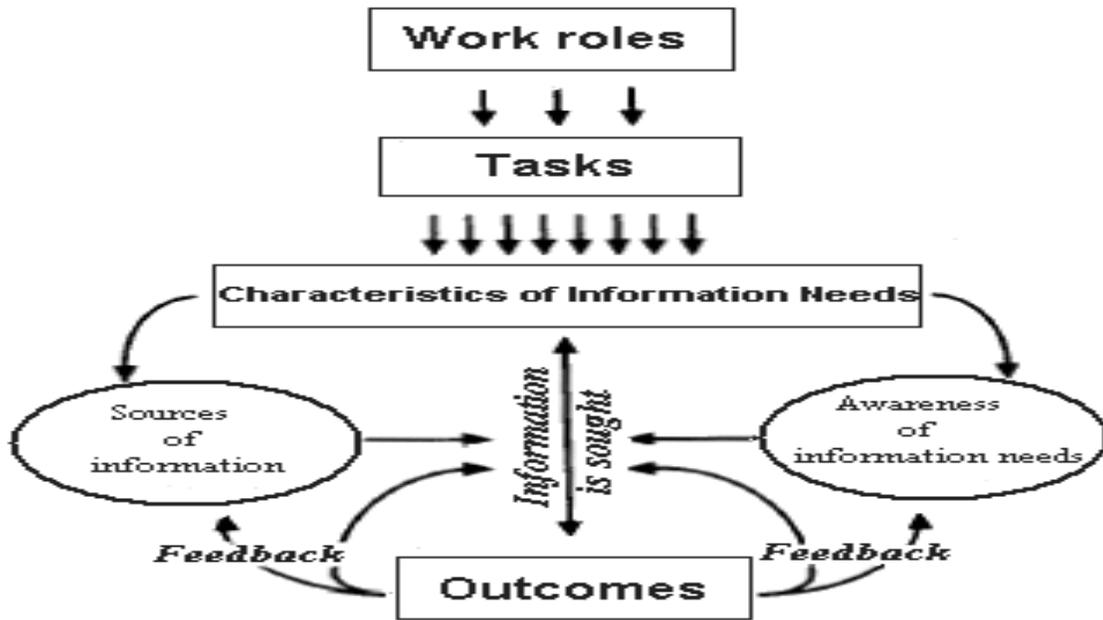
Figure 2.2.6: Leckie's et al.1996 general model of information-seeking of professionals (Source: Leckieet al. 1996)

Figure 2.2.6 above shows that Leckie's et al. (1996) general model of information seeking of professionals has five (5) components which include: work roles; characteristics of information needs; awareness of information seeking; sources of information and outcomes (Bitso 2011:28). In this regard, Robson and Robinson (2013:6) stated that the information needs which stimulate information seeking are prompted by the official responsibilities of professionals in their daily work. These information needs are determined by the individual's status in the organization, experience, specialisation, which filters the information seeking process (Kerins et al. 2004). The eventual success or failure of an information seeking event is determined by information sources available, as well as the individual's awareness about these sources and their usefulness (Kerins et al. 2004). Bitso (2011:28) stated that the information needs of an individual determine the information sources to be used as well as influence his or her awareness of information sources. These result in outcomes, which in turn provide feedback about the information seeking process (Bitso 2011:28). Robson and Robinson (2013:6) observed that the attributes of the information needs differ depending on the individual's profession, specialisation, and career stage.

In the current study, the Leckie'set al.(1996) model was found to be relevant in addressing the research questions dealing with issues such as the information needs of the rural dwellers; the skills used by the rural dwellers in identifying, accessing and using information; as well as the information sources used by the rural dwellers to satisfy their information needs. However, the model was found to be inadequate in addressing issues relating to channels through which information can be disseminated to rural dwellers, as well as the challenges faced by rural dwellers in seeking and using relevant information. Another weakness of this model as identified by Manyerere (2015:44) is that it has some limitations in terms of applicability to daily life information seeking as it is basically meant for work-related processes. Manyerere (2015:44) claimed that individual demographics (for example age, profession and geographical location) which may influence the information needs are not adequately incorporated into the model.

Ellis's 1989 behavioural model: According to Ellis (1989), the behavioural model came up from the analysis of the information-seeking of academic social scientists. The model was primarily employed to provide recommendations for information retrieval system design. Ellis (1989) identified eight major characteristics in the information seeking patterns which consist of starting, chaining, browsing, differentiating, monitoring, extracting, verifying and ending. The model as discussed by Aydin (2017:5) was proposed based on different types of information-seeking activities. According to Ellis (1989:178) cited in Jarvelin and Wilson (2003), the connection or interaction of these characteristics in information seeking pattern will largely depend on the situationthat an individual himself/herself in information seeking activities at a particular point in time. In line with this, Wilson (2000:52); Wilson (2004:1) and Preez (2008:38) concurred that Ellis's (1989) model describes the eight characteristics of information seeking behaviour to represent kinds of activities that the information user might want to finish. Wilson (2000:52); Preez (2008: 38) and Robson and Robinson (2013:4) identified the following activities which are intended to be done at different stages of the whole process of information seeking in Ellis's (1989) model:

Starting: This is a stage when a user will decide to undertake the search. Here the user will employ a number of strategies when he/she begins the searching, for example by asking some knowledgeable colleagues at the beginning ofthe seeking information on a particular topic;

Chaining: This is a stage where the information user will follow the citations available and chain both forward (footnotes) and backward (citation indexes). In other words, he/she will follow up references cited in the sources consulted (backward chaining), or identify the information items that cite those sources (forward chaining);

Browsing: This stage involves causal and relatively undirected searching that is semi-directed or semi-structured searching in an area of potential interest;

Differentiating: This is where the user will differentiate among the potentially relevant information sources available with a view to filtering the amount of information obtained. In other words, the user filters the sources by considering their quality, relevance and other characteristics;

Monitoring: At this stage the user will keep searching for information sources on his/her area of interest regularly with a view to keeping himself/herself up-to-date. It entails up to date searching where the user keeps himself/herself abreast about the development in his/her field of interest;

Extracting: This is the stage where the user will selectively identify and extract relevant information from the information source. It involves systematic searching through a source to obtain relevant material;

Verifying: This is where the user potentially identifies the useful citations correctly to check the accuracy of information; and

Ending: At this stage the searcher completes the process by tying up loose ends through a final search.
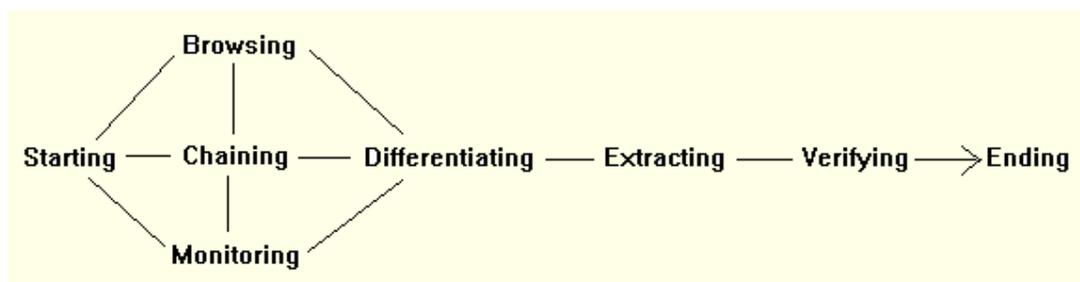
Figure 2.2.7: Ellis's 1989 behavioural model.

(Source: Ellis 1989)

Figure 2.2.7 above shows the relationship between the characteristics or components of Ellis's (1989) model. These components interact in various ways and in different information seeking patterns.

In the current study, Ellis's (1989) model was found to be relevant, as it can be used to address an issue relating to the skills used by rural dwellers identifying, accessing and using information. However, the major weaknesses of this model for the current study are that it is inadequate in investigating issues relating to the information needs of rural dwellers and the sources and services used by rural dwellers to seek and satisfy their information needs. Other weaknesses of the model are that it lacks the relevant constructs that address issues relating to the channels used in information dissemination to the rural dwellers, as well as the challenges faced by the rural dwellers in seeking and using information. In line with this, many researchers (such as Preez 2008:38; Robson and Robinson 2013:4; and Manyerere 2015:47) noted that details were not provided on the specific tasks which the subjects in Ellis's (1989) model were performing. According to them, the model does not specifically suggest the role and activities of information providers, nor does it consider the needs of the information seeker or the context (such as work environment) in which his/her needs arise. The model lacks other features such as the use, exchange or transfer of information. In addition, it was found inadequate in addressing issues relating to the challenges faced by users in seeking and using information.

2.3 Theoretical models adopted

Specifically, two models were adopted to guide the current study. These were Aina's 2006 model of library - extension service linkage andWilson's 1981 (Wilson 1981) model of information behaviour. Aina's 2006 model and Wilson's 1981 model were both found to be useful for their general applicability to this study. This study focused on areas such as: the information needs of rural dwellers; the skills used by rural dwellers to effectively use, identify, access and use information from public libraries; the information sources and services used by rural dwellers to seek and satisfy their information needs; the channels used by the public libraries to disseminate information to the rural dwellers; and the challenges faced by rural dwellers in seeking and using information from public libraries.

Rational for the adoption of Aina's 2006 model: The adoption of this model to guide the current study was informed by the fact that rural dwellers share common characteristics with

rural farmers as captured by the model in terms of information needs, literacy levels and to some extent locality. The constructs that guided the current study in addressing the research question are discussed below.

Establishing linkage (Collaboration): The model suggests a triangular linkage between farmers, extension agencies and public libraries in the provision of agricultural information to rural farmers. It is expected that the CIRCs which will be established in rural communities which will provide information directly to farmers and extension agents. The linkage demonstrates farmers and libraries will receive agricultural information directly from extension agents as the farmers will be able to forward their information needs to the library and extension agencies. This guided the current study in identifying the information needs of the rural dwellers. The construct also was found to be adequate in the current study in addressing issues relating to the skills used by rural dwellers in identifying, accessing and using information from the public libraries. It also guided the current study in determining the channels through which public libraries disseminated information to the rural dwellers in the area under study.

Gatekeepers: Aina's 2006 model suggests that in a rural setting, public library and extension agents will identify gatekeepers who are living with their fellow rural farmers. The gatekeepers will be the first point of contact for the farmers when they experience problems relating to their farming activiteis. This construct was found to be helpful in the current study in addressing issues relating to the challenges faced by rural dwellers in seeking and using information from public libraries.The construct also guided the current study in addressing issue relating to the skills rural dwellers used in identifying, accessing and using oral information sources from public libraries.

Information materials: The model suggests that CIRCs will be established in rural communities under the public library system. The CIRCs will collect all information materials in forms of audio and video-cassettes/DVDs, audio and video-record players, films, projectors, posters and leaflets on agriculture and make them available torural farmers. This variable was found to be helpful in the current study in addressing the issue relating to the information sources used by the rural dwellers from public libraries in the area under study.

Information repackaging: The model also suggests that public libraries are expected to redesign and repackage their information sources and services and tailor them to languages and formats accessible to rural farmers. This variable was also found to be helful in the

current study in addressing issues relating to information services provided by public libraries to rural dwellers. The variable was also found to be adequate in addressing the issue of language barrier which was one of the challenges faced by the rural dwellers in seeking and using information from public libraries. Oni et al. (2014:66) buttressed that public libraries are expected to repackage and tailor their information materials to meet the information needs of rural inhabitants in a language and format that they understand.

Rational for the adoption of Wilson's 1981 model: The adoption of Wilson's 1981 Information Behaviour Model to guide the current study was also justifiable having all the basic and relevant constructs that guided the study to address the research questions. These include: information need; information-seeking behaviour; information use; information sources and services; and information transfer and exchange.

Information needs: Wilson 1981 model suggests that information-seeking behaviour arises from the recognition of an information need perceived by an information user. This construct was found to be adequate inthe current study in addressing the issue relating to the information needs of rural dwellers in the North-Western Zone of Nigeria.

Information-seeking behaviour: The model demonstrates that information user seeks information from formal sources or informal sources in order to satisfy his/her information needs. This construct was found to be useful in the current study in addressing issues relating to the skills used by rural dwellers to identify, access and use information from public libraries in the area under study.

Information use: Wilson's 1981 model demonstrates that the information seeking behaviour of the user may result in success or failure. If s/he is successful in obtaining the relevant information, the user will fully or partially use it to satisfy the perceived need. This variable was found to be helful in the current study in addressingissues releting to the information sources and services used by the rural dwellers from the public libraries in the area under study to satisfy their needs.Odefadehan, Akinola and Odefadehan (2016:2) argued that the identified information need, information availability, as well as information access, cannot make any significant impact on the lives of people if they do not make use of the information.

Information sources and services: Similarly, the model demonstrates that information user seeks information from formal sources or informal sources to satisfy his/her perceived information needs. This construct was also found to be adequate inthe current study in

addressing the issue relating to information sources and services provided by public libraries to rural dwellers in the North-Western zone of Nigeria.

Information transfer and exchange: The Wilson's 1981 model also demonstrates that part of the information behaviour of information user may include other individuals through the exchange and transfer of information by the use of appropriate channels. The information perceived as useful may be used by the information user and passed on to other people who may be in need of it. This construct was found to be useful inthe current study in determining the channels used by public libraries to disseminate information to rural dwellers.

Information barriers: The Wilson's 1981 model suggests an information seeker in his/her effort to obtain information to satisfy the basic needs is likely to meet with different barriers. The barriers could be personal, interpersonal or environment related. This construct was found to be adequate in the current study in addressing the issue relating to the challenges faced by rural dwellers in seeking and using information from public libraries in the North-Western zone of Nigeria.

2.7 Summary

The chapter discussed the models that underpin this study. The chapter began with an introduction, which was then followed by a review of different models relevant to the current study. The chapter articulated the main arguments, strengths and weaknesses of the models reviewed. Two models were found to be adequate in addressing the research questions. These included Aina's 2006 model and Wilson's 1981 model. On the basis of this review, it can be seen that different models have focussed on the different aspect of human information behaviour and public library services. These differences could be attributed to the fact that these models originated from different empirical studies, and the perception of the researcher in the current study on information behaviour and provision of public library services. Chapter Three reviews the available literature relevant to the major components and variables of the models that guided the study in answering the research questions.

CHAPTER THREE

REVIEW OF RELATED LITERATURE

3.1 Introduction

The focus of this chapter is a review of the available literature relevant to the current study. According to Gambari (2009:45), a review of related literature is a partial summary of the previous works related to the research questions, hypothesis or focus of an intended research. The review of related literature is an exercise in which the researcher identifies, locates, reads and evaluates previous studies, observations, opinions and comments related to his/her study (Suleiman 2009:59). According to Levy and Ellis (2006:183), researchers conduct literature reviews in order to find out what is already known in their field of study. The process involves the identification of important published and unpublished works on the topic under study, as well as articulating points of agreement, consensus, disagreement and controversy (Adeda 2007:6).

Accordingly, Adeleke (2017:46) describes the literature review as a significant part of a research which enables the researcher to clearly state contradictions and gaps in existing knowledge. Boote and Beile (2005:3) cited in Randolph (2009:1) assert that a researcher can only perform significant research when she/he first understands the literature in the field of his/her study. In this regard, Hart (1998) and Sekaran (2003) cited in Abbas (2015:46), assert that the review of related literature covers published and unpublished works from secondary sources. According to Abbas (2015:46), the main purpose of the review is to draw the attention of readers to the important variables related to both the research problem and significant findings in the area under study as obtained in previous research. The review of related literature in the current study covered both empirical and theoretical literature from scholarly journal articles, books, and chapters in books, theses, conference proceedings, websites and others. The literature reviewed covered the world view; African view and then Nigerian view.

The yardstick used in reviewing the literature were the research questions of the current study and the major components and variables of Aina's (2006) model of the library extension service linkage and Wilson's (1981) model of information behavior which underpinned this study. The thematic areas from the research questions of the present study include: information needs of rural dwellers; skills used by rural dwellers to effectively identify,

access and use information; information sources and services used by rural dwellers to seek and satisfy their information needs; channels used in disseminating information to the rural dwellers; as well as the challenges faced by the rural dwellers in seeking and using information. The key variables from Aina's (2006) model include community information resources centers (CIRC); the linkage between extension agents, rural farmers and library; identification of gatekeepers and information repackaging. The key variables from Wilson's (1981) model include information need; information sources and services; information access; information use; information transfer; information exchange; and information barriers.

3.2 Information needs of rural dwellers

The need for information in human development cannot be over-emphasized. Information is needed by all and sundry in order to know what is going on in the society, to acquire basic needs of life, as well as to cope with every given situation (Nwalo and Madukoma 2012:61). In the United States of America (USA), for example, Vavrek (1995:36) reports that the information needs of rural Americans were centered on social activities such as hobbies/crafts, local business/investment, action of government officials, how to reference, legal matters, local history/genealogy, local news, national news, health/medical services, current decisions of local government. Others information needs include matters of self-improvement, changing jobs, local community events, programmes of education, among others.

Reddy (2003) carried out research with a focus on the information behavior of health-care providers. In the research, information needs of physicians were categorized into unrecognized and recognized needs. The unrecognized information need is when the information is available, but the individual is unaware of its availability; while the recognized information need is when he/she seeks for it. Similar research conducted by Jean (2012), who focused on the information needs of diabetic patients, revealed that their information needs revolved around diet, exercise, diagnostic tests/procedures, diabetes management, risk factors, and diabetes related complication.

In the north-east of Scotland, Marcella, McConnell, Moore and Seton (1996) assert that the information needs of rural dwellers were related to agriculture, fisheries, forestry, energy, tourism, food, as well as sales outlets. Research carried out by Zou and Zou (2014) which was limited to information needs of elderly people in rural communities in China, showed

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that the information needs of this category of people revolved around physiological needs such as food, clothing and shelter, action, health care, and pension policy information. Other needs includedeffective friend and family activities, club activities information, respected self-assessment, social evaluation information, self-realized knowledge skills, as well as job information.

In Asia, research from Malaysia (Yusop, Ibrahim, Yusof, Aji, Dahalin, Ghazali, Saad, and Abu 2013), Bangladesh (Islam 2006), and India (Bachhav 2012; Omar, Shaffril, Bolong and D'Silva 2012; Thanuskodi and Pandiselvi 2014) showed that the information needs of rural dwellers in these countries are largely concerned with fishing, rice paddies, palm oil, rubber, agriculture in general, medical and health matters, education development, religion, business, lifestyle, entertainment, family matters, sport, politics, career opportunities, as well as IT/computer skills and knowledge. Other areas included food and nutrition, environment, technological, culture, employment, livestock, loans, politics, family planning and entertainment among others.

In Africa, research from South Africa (Maepa 2000; Jiyane 2002), Botswana (Mutshewa, Grand, Totolo, Zulu, Sebina and Jorosi 2010) and Tanzania (Mtega and Ronald 2013) has shown that the information needs of rural dwellers revolved around areas such as pension, business, crime, agriculture, and transport, proper housing, transport and communication systems, basic health care. Others include literacy programme, current affairs, job adverts, legal matters, career development, non-governmental organizational activities, and politics among others.

In the Nigerian context, research carried out by Ape (2012); Emmanuel (2012); Momodu (2012); Udofia (2012); Daudu and Mohammed (2013); Mtega and Ronald (2013); Idiegbeyan-ose, Adekunjo, Ilo and Odion (2015); Patience (2015); Ezema (2016) showed that the information needs of rural communities in Nigeria can generally be categorized into health; agriculture; education; housing; employment, transportation, welfare, family, legal information, crime and safety, policies and government, land and human rights, markets, civics, politics, finance (credit), academic, leisure, international news, occupations, farm inputs, adult literacy programmes, social services, and religion. Others includedprices of local commodities, water conservation, job vacancies, food and nutrition, national poverty eradication programme, community development, cultural activities and empowerment strategies.

Kamba (2009) is of the opinion that a critical analysis of the information needs of rural communities should not be overlooked for sustainable rural development. In this regard, research by (Momodu 2012:91 and Ovwasa, 2014; Igwe, Ndubuisi-Okoh, Akuma and Okoche 2015) highlighted that the information that rural dwellers need must be effective, relevant, accurate, timely, current, complete, clarified and cost-effective for optimum use and new skills acquisition. Thus, the information needs of rural dwellers must be identified, and the right information must be made available, accessible, as well as utilized in order to achieve the desired results (Odefadehan, Akinola and Odefadehan 2016).

3.3 Skills used by rural dwellers to identify, access and use of information

Basically, rural dwellers need some skills in order to access and use information relevant to their needs. These skills are necessary considering the fact that information comes in different formats and languages. Public libraries are expected to ensure access to the right information by all categories of individuals in a rural community. What is more, it is a basic right of every citizen to have access to information irrespective of his/her locality (Idiegbeyan-ose et al. 2015). All library policies, activities, operations and resources are built upon the principle of information accessibility (Obasi 2015:4). It should be the basic principle of public libraries in rural areas to ensure easy access to the right information by developing effective library policies meant for sustainable rural development. Rural dwellers should not only have access to information, but should also be able to effectively use the information. In line with this, Odefadehan, Akinola and Odefadehan (2016:2) argue that the identified information need, information availability, as well as information access, cannot make any significant impact on the lives of people if they do not make use of the information.

In the USA, the National Commission for Libraries and Information Science [NCLIS] (2008:26) notes that access to library and information services as well as strengthening the information infrastructure enhances access to information. Also from the USA, research carried out by Jean (2012) showed that the skills used by diabetic patients in accessing information were for consulting doctors, nurses, diabetes educators, dieticians, pharmacists, family members and friends to access information. Others were brochures/pamphlets, magazines, books, internet, and television. In the UK, research conducted by Stokes (2013) reveals that poor information searching skills among nursing students resulted in dissatisfaction of the search results. Therefore they would have to revise their searches to obtain the right information.

In South Africa, research conducted by Maepa (2000) showed that rural villagers used radio, friends, neighbours, acquaintances, and professionals such as teachers and nurses in their information seeking activities. Mahwasane (2008) carried out research which focused on the provision of library services to disadvantaged school children in Limpopo Province, South Africa. The findings showed that beside the library, learners and teachers often approach other individuals from institutions, family and friends to obtain information for the school work. They also contacted teachers, nurses, church ministers, radio and television, and textbooks among others. Research from Tanzania, conducted by Mtega (2012) for instance reveals that there was poor accessibility to information in the rural areas, and in 2008 about 90% of print publications circulated only in urban centers.

Still in Tanzania, research carried out by Kiondo (1998), focused on the information seeking behaviour of rural women. The findings of the research showed the rural women under study accessed information through friends and relatives, village leaders, health extension workers, hospitals and clinics. However, the research was limited to the information needs of rural women, disregarding the information needs of other members of the rural communities. Manyerere (2015) conducted similar research on the information seeking behaviour of rural women involved in kiosks and poultry businesses in Tanzania. The findings of the research showed that these women lacked the skills to access information from cell phones due to lack of electricity and absence of effective telecommunication services in the rural areas. The research was centered on the information behaviour of rural women alone, excluding the information behaviour of other individuals in the rural communities.

In Nigeria, some researchers hold the view that access to information should be guaranteed for rural dwellers based on the considerations of their local environment. For example, Harande (2009) holds the view that the ability of citizens to access and make effective use of information is the only way that ensures advances in a society. Concurring, Kamba (2009) adduces that having access to the right information by the rural dwellers can drastically address major problems that hinder rural community development. In the opinion of Nwalo and Madukoma (2012:61) information seeking and use by the rural dwellers should be seen as processes through which they make an inquiry and wise decisions. As such the progress and development of any nation depends upon the ability of its citizens to acquire, produce, access and use pertinent information (Oni, Nomuje and Oshiotse 2014). In line with this, Idiegbeyan-Ose et al. (2015) argue that rural dwellers in Nigeria cannot fulfill their potential

and contribute significantly to national development if they lack the skills to access the relevant information. In agreement, Onyenachi, Akidi and Onyekweodiri (2015:41) state that rural development in Nigeria can only be effective if rural dwellers have the basic skills to access relevant and diverse information for their activities.

Consequently, in the views of Harande (2009) and Onyenachi, Akidi and Onyekweodiri (2015:41), access to information is critical in that it enables people to know their rights as regards to welfare and supports to deal with social discrimination in society. As such rural dwellers need the relevant skills required for accessing the information that will enable them to fight for their rights. Most rural communities in Nigeria lack basic and social amenities, because the rural dwellers lack access to practical information that can help them in fighting for these rights. Besides, access to information and advice should be regarded as the key resources for local people to maintain active and independent lives (Abissat 2008 cited in Onyenachi, Akidi and Onyekweodiri 2015:41). Obasi (2015:6) opines that public libraries in Nigeria are the right institutions to ensure free access to information by all members of the community. The public libraries play a key role in collecting, organizing, and exploiting information as well as providing access to a wide range of information sources. They also provide services relevant to the needs of every individual in a society. Thus, public libraries are the reliable institutions that rural dwellers can rely on to have access to and use the relevant information sources and services to satisfy their information needs for sustainable rural development.

3.4 Information sources and services used by rural dwellers

Provision of information sources and services is essentials in meeting the information needs of rural dwellers. In addition, rural dwellers used various forms of information sources and services to satisfy their information needs.

Information sources: In Singapore, the sources used by the working professionals in accessing information include books/manuals, face to face communication, onlineInfo, email and phone/chat (Agarwal 2009).In Pakistan, the chief sources of information to rural farmers as identified by Naveed, Anwar and Bano (2012:3) were the extension agents, interpersonal relationships with friends, relatives, dealers, mass-media, more experienced farmers/co-farmers, as well as neighbors.

In the African context, for example, research from Botswana, carried out by Nkabinde (1988) found that leaders, the Bible, books, pamphlets, workshops, and church among others, were the major information sources used by community members. In Kenya, Muyasi, Lloyd and Doland (2003) carried out research which revealed that farmers obtain agricultural information on pasture weed management technologies through agricultural offices, research stations, neighbours, agricultural shows, opinion leaders, farmer excursions, as well as seminars/training. In Ethiopia, Tsehay, (2014) pointed out that the information sources used by the rural women to satisfy their maternal information needs were health extension workers and health professionals, friends and families, radio, booklets and brochures.

In Tanzania Mtega (2012); Churi, Mlozi, Tumbo and Casmir (2012); Mtega and Ronald (2013) conducted research which revealed that several sources of information were used by rural communities, especially in the area of agriculture. The information sources include village heads, agricultural extension workers, neighbors and friends, family/parents, radio, TV, cell phones, internet, books, brochures, films, leaflets, newspapers, magazines, non-governmental organizations, farmers groups, personal experience, agricultural inputs suppliers, posters and agricultural shows. Other means also include social group gatherings, religious leaders, women's meetings, researchers, churches and mosques, notice boards and seminars which are information sources used by rural people.

In Nigeria, research by Obinyan et al. (2011) showed that the information resources available in public libraries in Nigeria included reference materials, periodicals, biographical sources, fictions, non-fictions and indeginous knowledge resources. Likewise, a research by Emmanuel (2012) revealed that the major information sources used by the rural farmers included informal sources (such as town criers, village meetings, neighbours and rumours) and formal sources (such as radio and television as well as documentary sources). Others were newspapers, magazines and manuals. Similarly, Chinwe et al. (2014) carried out a research with a focus on information needs of rural dwellers in Nigeria. The findings showed that the information sources available in Local Information Centres included textbooks, newspapers/magazines, picture books, audiovisuals, television and radio among others.

Information services: Public library and information services are equally important in meeting the information needs of rural dwellers. The rural dwellers like their counterparts in the urban centers require a range of services that can satisfy their information needs. The main aim of information service provision in rural communities is to ensure easy accessibility

to the right information by the rural dwellers. Thus, enhanced rural library programmes facilitate the provision of effective information services which also ensure access to adequate and relevant information that will improve the political, economic, educational, cultural and recreational development of any society (Harande 2009:5; Folashade 2014:119).

In Nigeria, studies by Omopupa (2006), Ebiwolate (2010), Saleh and Lasisi (2011), Enemute and Okorodudu (2012), Oyeronke (2012), Akinola et al. (2013), Chinwe, Ogbonna and Osuchukwu (2014), Joy and Idowu (2014) and Obasi (2015) revealed that public library and information services generally revolved around community information services; reference services; story telling services; film show services; reading competition services; career information services; photocopying services; opening hours; online internet services; lending services; reference services; photocopy services, indexing and abstracting services and bibliographic services. Others include telephone, recreational and advisory services, and current awareness, selective dissemination of information, bookmobiles, referral services, children/school services, computers/internet/ICT, translation services, user education, outreach and extension, adult literacy programmes, and consultancy services, audiovisual services; packaging and repackaging of information services among others.

For that reason, Iwe (2003:174) had earlier held the view that the rural libraries should serve as congregating centers where both the literate and illiterate people can use materials, watch films or listen to talks organized by a library, or take part in an organized literacy programme that can help them to make maximum use of the library materials.

3.6 Channels used in disseminating information to rural dwellers

Information channels are among the most important parts of a communication system in any community. Anyanwu (2008) is of the opinion that no matter how relevant information might be, if it is wrongly packaged or transferred it will never reached the target audience successfully. It is universally agreed that the improvement in the living conditions of a population largely depends on the channel used in disseminating information to that population (Momodu 2012:91). As such different channels are used in disseminating information in different communities based on the peculiar nature of the target audience.

Therefore, the peculiar nature of the rural communities should not be overlooked in choosing the appropriate sources/channels in disseminating information to rural dwellers. Correa et al. (1997:8) stress that the most effective current means of communicating information to rural

communities is via audio-visual media such as radio, audio cassette and film. According to the Food and Agricultural Organization [FAO] (2006:3), in rural areas, information, knowledge and skills meant for development are exchanged between farmers, extension/advisory services, information providers and researchers either personally or through media such as radio, print and more recently the new "Information and Communication Technologies" (ICTs). As such information dissemination to rural communities requires particular channels of communication (Daudu and Mohammed 2013:235).

In China, for example, information channels such as television, radio, word of mouth, and newspapers among others, are used in disseminating information to rural communities (Zou and Zou 2014:114). Research from India, conducted by Ramachandran, Jaggarajamma, Muniyandi and Balasubramanian (2006) indicates that more than 80% of the villages have community TV and cable connections. However, in rural South India in particular, television is the main channel of information (100%) and the channel of communication that could reach out to what they called "the interior pockets" villages; 53% of villagers get information through local panchayats; 55% through wall posters; 43% through Pandora; and 18% through loudspeaker announcements. Research by Bachhav (2012), Chaudhary and Kameswari (2015) and Sinha (2015) found that rural farmers, rural women and other rural dwellers in Pakistan, access information through various channels such as newspapers, magazines, television, radio, mobile phones, community information centers (CIC), public libraries, other farmers or colleague farmers, as well as an agricultural exhibition.

In Nigeria, research by Daudu and Mohammed (2013), Ifukor (2013),AnnuneEzeani and Okafor (2014),patience (2015), Odefadehan, Akinola, and Odefadehan (2016) showed that the information sources/channels used in disseminating information to rural dwellers include town criers, oral information through face to face communication, neighbours,friends, age groups, elders, farmers groups, village leaders, agricultural extension officers, family/parents, radio, TV, internet, books, brochures, films, leaflets, newspapers and magazines, colleagues, market places, churches, mobile phones, social/political meetings, traditional festival, role play, songs and dance, demonstration, lecture and exhibition. Others include bill boards, government circulars, newsletters/bulletins, memoranda, posters and internet among others. A research conducted by Uzuegbu (2016) concurred that mass media, and other sources/channels such as information systems, education and training, agents, personal

contacts and miscellaneous channels were the right channels of disseminating information in the rural areas.

3.7 Challenges faced by rural dwellers in seeking and using information

In every community, people face some particular challenges in seeking and using information. These challenges or barriers could be on the part of the information users, information providers, societal norms and values, or the information system itself. Therefore, these challenges are discussed as follows:

Absence of library services in rural communities: The absence of library services in rural communities is a challenge faced by rural dwellers not only in Nigeria but in some other parts of the world. Asamoah-Hassan (1997:122) reported that in South Eeast Asia, book boats, mobile library vans and book deposit station are provided in villages where buildings or centers to stock the books are absent. Issak (2000:12) noted that the existence of public libraries in Africa today is more in favour of urban people. Issak (2000:12) therefore, argued that there is a need to find a balance in the provision of public library services between urban and rural areas in the continent. In Nigeria, Opara (2008:351) observed that beside the public libraries established by the state government, very few local government councils established such libraries due to the absence of legislation from house of assemblies requiring them to do so. Daudu and Mohammed (2013) hold the view that public libraries and other information service providers are either non-existent in the rural areas or are performing poorly in publicizing government activities and programmes designed for rural people. Oni et al. (2014:67) confirmed that library-based information services such as provision of books and reading materials, SDI/CAS, reprographic, reference/referral, and lending services were almost non-existent in some rural areas in the country.

Most of rural communities in Nigeria as noted by Oluwaseunfunmi (2015:10) and Patience (2015:353) lack public libraries. Oluwaseunfunmi (2015:10) claimed that fewer young adults in the rural areas used public library as a result of unavailability of public library services in the rural areas. Similarly, Ejedafiru and Toyo (2015:21) and Patience (2015:353) confirmed that library and information services are lacking in rural communities, despite the fact that rural communities constitute the larger population. Ejedafiru and Toyo's (2015) concurred and they commented that there were great differences between urban and rural dwellers in terms of accessibility to public library services and ability to read and write. Nkechi

(2015) espoused the view that the absence of rural libraries has resulted in low levels of literacy and ignorance among rural dwellers.

Centralisation of public library services: Centralisation of public library services at the local government headquaters' is another challenge faced by rural dwellers in seeking and using information from public libraries. This challenge has been noted even in developed countries. For example, in Africa, Issak (2000) lamented that centralizationin the management of libraries is one of the major challenges confronting the provision of public library serices. Harande (2009:2) had earlier noted that in England access to and the ability to use information and knowledge are not equally distributed between urban and rural communities. The rural residents have to travel a greater distance to reach services in the urban centers. Department for Environment, Food and Rural Affairs (Defra) and Arts Council (2014:12) confirmed that in England, there is a relative scarcity of library services and facilities in the rural communities as compared to the urban centers. Oni et al. (2014:66) espoused the view that distance could be a barrier to information accessibility.

In Nigeria, Nkechi (2015) observed that the establishment of public libraries was concentrated in urban centers, while rural communities are neglected. Oyeronke (2012:72) had earlier asserted that the people that public libraries are meant to serve are generally not fully aware of the importance of having such libraries in their community. Nnadozie et al. (2015:11) noted thatthe establishment of rural libraries in Nigeria for the extension of public library services beyond state capitals has been a challenge over the years. In line with this, Momodu (2012:95) argued that to enable library services to reach the grassroots level, local government councils should establish and finance libraries in their communities. Similarly, Igwe et al. (2015:168) suggested that public libraries in Nigeria should be given adequate attention, decentralized to local government areas, and empowered to provide core services for the rural dwellers.

Ineffective library services in the rural communities: The ineffectiveness of the library services is another major challenge faced by rural dwellers when seeking and using information from public libraries. Etebu (2009) held the view that in Africa, provision of information services was based on traditional methods that are appropriate for literate people may not be appropriate for rural dwellers. This is because majority of rural dwellers are used to oral tradition. Therefore, Etebu (2009) argued that unless information providers assess and recognize their target groups and devise the best means, they cannot disseminate meaningful

information for sustainable development to rural dwellers.Momodu (2012:95) concurred that due to this depressing challenge, most rural libraries cannot meet with the information needs of their communities. Momodu (2012:95) further suggested that the libraries can disseminate information to the rural populace by way of organizing exhibitions, giving lectures and talks (Momodu 2012:95).

Similarly, Nnadozie et al. (2015) noted and commented that the manual system of library service delivery, which is still prevalent in Nigeria, is fraught with shortcomings that made the system to be inadequate in meeting the challenges of information services needed in this millennium. Accoding to Agodi and Obasi (2016), this was because public libraries in Nigeria lacked well defined programmes and policies. Agodi and Obasi (2016) added that this negated the libraries from rendering effective and efficient information services to enhance economic and educational development in Nigeria.

Inadequate/inappropriate information resources: The inadequacy/inappropriateness of information resources meant for rural communities have been a challenge faced by rural dwellers in seeking and using information to satisfy their needs from public libraries. Nyana (2009:9) observed that the major hindrances to effective provision of information and services in Africa were inappropriate collections, high levels of illiteracy, and lack of incorporating oral tradition in the provision of information services among others. Obinyan et al. (2011) noted and commented that in Nigeria for years, public libraries in rural areas have been associated with low patronage resulting from the inappropriateness of their collection for the information needs of their clienteles. Research by Chinwe et al. (2014) and Ejedafiru (2015) showed that lack of adequate and relevant information resources and services and absence of literacy programmes in the rural areas were among the major challenges affecting the provision of public library services in rural areas. Research by Salman et al. (2017) also found that disorganized and out of date library materials, inadequate information sources, resources and facilities, non-functional library catalogues were amongthe challenges affecting access and use of the library services.

Absence of Community Information Resource Centers: Research conducted by Maepa (2000) in South Africa found that only 13.6% of the respondents indicated the availability of library or Community Information Centers in their villages, 80.1% indicated unavailability of library or Community Information Centers in their villages, and 6.3% indicated their unawareness on the availability or otherwise. In Nigeria, Igwe et al. (2015:168) noted that

one of the major challenging scenirios confronting the provision of library and information services is absence of community libraries and Information Centers.

Similarly, Igwe et al. (2015: 168) buttressed that Community Information Centres are hardly seen in Nigeria for providing information services to rural dwellers. They claimed that where they exist, the dilapidated nature and state of information and human resources, as well as poor infrastructural facilities, will not enable them to meet the information needs of the rural dwellers. Olanrewaju (1998) advocated then that local government authorities in collaboration with public libraries should as a matter of principle establish Rural Community Information Service Centers in rural communities. These centers will serve as regular television and occasional video-viewing as well as radio and gramophone record listening centers. Olarenwaju (1998) added that they could also serve as centers for the exhibition of posters that could espouse public enlightenment campaigns in various rural communities.

Language Barrier: Among the problems encountered by rural libraries is the inadequacy of material in local languages. In South Africa, research conducted by Maepa (2000) found that most of the books are published in English language when, in actual fact, most of the rural populace cannot even read and write in their local dialect. In Nigeria, Kari (2007), Kamba (2009) and Idiegbeyan-Ose et al. (2015) are of the view that the majority of rural dwellers lack access to basic information services due to language barriers. Momodu (2012:95) pointed out that among the challenges encountered by rural libraries was the inadequacy of information sources in local languages. This was because most of the library books are published in English when most of the rural dwellers cannot even read and writes in their native languages (Momodu 2012:95). Similarly, research Chinwe et al. (2014) and Ejedafiru (2015) found that language barrier was one of the major challenges affecting the provision of public library services in rural areas. Research by Oni et al. (2014) found that language was one of the major barriers to information accessibility among rural inhabitants. Hence, Anie (2014:209) suggested that translation of relevant materials into local languages that can best be understood by rural public library users should be undertaken.

Lack of qualified library personnel: The availability of qualified library personnel in public libraries significant in the provision of effective information resources and services that can meet the information needs of the rural dwellers. However, in the opinion of Opara (2008:356), this is not achievable in Nigeria as a result of poor conditions of service in the country, which is so bad that in some states, public libraries that ought to be headed by

professionals are instead headed by para-professionals or even non-professionals including the branch libraries in some local government areas. This challenge is not only encountered in Nigeria but in the entire African continent. Issak (2000:12) observed that lack of human resources that could run the activities of public libraries professionally has been identified as one of the major challenges that hamper the provision and utilization of public library services.

In Nigeria, Abdulkarim (2010) noted that most public libraries lack adequate and professional staff needed to manage the affairs of the libraries effectively and efficiently. Research carried out by John-Okeke and Owoeye (2011) as an overview of public library services in Lagos state, Nigeria, revealed that generally libraries in the local government areas are headed by non-professionals librarians who lacked the necessary qualifications to operate the libraries. Momodu (2012:95) confirmed that lack of qualified personnel is one of the problems often encountered in running the activities of public libraries in Nigeria. In this regard, Igiamoh and Ogunwemimo (2013) argued that unless public librarians are adequately and properly trained with the necessary skills and knowledge that will prepare them for the task ahead, they will never be efficient in discharging their individual responsibilities.

Research by Esievo and Adewole (2014) showed that inadequate professional staff was among the challenges that hampered the roles of library in rural communities. Likewise, research by Oni et al. (2014) also showed that inadequate personnel was among the major problems faced by information officers in disseminating information to rural inhabitants. Similar research by Onyenachi et al. (2015) revealed that inadequate human resources were among the major factors that militated against the provision of library services in rural communities. Likewise, Salman et al. (2017) noted that poor attitude of staff and lack of professionally qualified library staff were among the major hinderances that have been affecting the accessibility and use of library services in the country.

Poor infrastructural facilities: Rural infrastructural facilitates are essential in the provision and utilization of public library services in the rural areas. They facilitate the provision of the services on the part of public libraries. Similarly, rural infrastructural facilities facilitate easy access to library services by the library users. However, in Hawaii, Lundeen, Tenopir and Wermager (1994:197) identify poor infrastructure as one of the barriers to information access among rural health care workers. In Ethiopia, Tsehay (2014) undertook research with a focus on health information seeking among rural women. The research found that the rural women

under study find it difficult to access maternal and health information due to poor infrastructure in the rural areas.

In Nigeria, Iwe (2003) observed then that the majority of rural areas in Nigeria lacked good access to roads, pipe-borne water, electricity and factories or industries. Momodu (2012:95) claimed that the unavailability of social amenities like electricity, good water supply, hospital and community health centers and schools often discourage people from accepting jobs in rural areas. Consequently, this adversely affects public libraries from attracting qualified personnel to work in rural libraries. Chinwe et al. (2014) in their study confirmed that professional librarians resist job offers by Community Centres due to their rural locations.

From another perspective, Anie (2014:207) pointed out that a successful library automation and use of ICTs depend largely on uninterrupted power supply which is lacking in the rural areas. Kari (2007), Kamba (2009) and Idiegbeyan-Ose et al. (2015) noted and commented that the majority of rural dwellers lack access to basic information services due to unstable electricity and high cost of ICTs. Research by Ugwuanyi and Chukwuemeka (2013), Egbe (2014) and Anie (2014) showed that rural areas in Nigeria lack virtually all infrastructural and social amenities like roads, medical and health facilities, portable water, and electricity among others. Emojorho and Ukpebor (2013:20) noted that majority of the public libraries have no Internet services. Research by Oni et al. (2014) revealed that slow internet response and erratic power supply were among the major problems affecting information dissemination in rural communities.

Research by Chinwe et al. (2014), Ejedafiru (2015) and Onyenachi et al. (2015) found that lack of physical and basic infrastructure were among the major challenges affecting the provision of public library services in rural areas. Patience (2015) buttressed that apart from the problems of little or no education, lack of good access roads, electricity, and pipe borne water, industries and other social amenities were also among the challenges that hindered effective dissemination of information in rural communities. Likewise, a research by Agodi and Joy (2016) revealed that inadequate infrastructural facilities were among the major challenges affecting the provision and utilisation of public library services in Nigeria. Research by Ezema (2016) found that lack of power supply has been a challenge among rural women in Nigeria to access electronic information from the radio, TV and Internet. Salman et al. (2017) in their research concurred that among the major challenges that have been affecting access and use of the library services in Nigeria were irregular electric supply.

Economic constraint: Poverty and illiteracy were considered as the major barriers to rural development in any nation (Harande 2009:3). Due to abject poverty, illiteracy and poor living conditions, people in rural areas find it difficult to abandon their daily activities for survival and visit public libraries to seek and use information. These had significantly resulted in information hunger among rural communities in most of developing countries (Harande 2009:4). In line with this, Oni et al. (2014) argued that proper dissemination of information for agricultural and rural communities is essential in the fight against poverty and deprivation. Studies from Tanzania (Kiondo 1998), Nigeria (Kari 2007; Kamba2009; and Idiegbeyan-Ose et al. 2015) indicated that the majority of rural dwellers lack access to basic information services due to their low income levels. This has significantly been a barrier to access to basic informationamong majority of people in the rural areas.

Simalrly, Adewole (2014:101) observed that the use of library resources in rural communities was insignificant due to lack of awareness of the services, illiteracy and poverty among the rural dwellers. Likewise, research by Chinwe et al. (2014) and Ejedafiru (2015) found that poverty was one of the major challenges affecting the provision and utilisation of public library services in rural areas. Agodi and Obasi (2016:54) concurred that the poor economic, educational and political situationin Nigeria had over the years been the cause of public library services to decline. Consequently, this hadled to poor perception and patronage of public library services by the society (Obasi 2016:54).

3.8 Issues involved in the provision of public library services to rural dwellers in Nigeria

Provision of public library services in Nigeria is fraught with issues that require the attention of authorities concerned, and other stakeholders. These issues revolve around the laws establishing the libraries, funding, staffing, services, information resources, as well as the library buildings. The bottom line is that these indicators determine the existence, cost-effectiveness and the standard of the information services provided by public libraries in rural communities. These issues have been discussed and debated by many scholars as follows:

Library laws/legislations/policies: Public library laws/legislations/policies play a key role in the provision of effective library services in rural communities in Nigeria. The provisions of laws/legislations/policies enable public libraries to perform their statutory functions effectively. Their position is essential in the provision of effective public library services to rural dwellers. The fundamental function of these laws is to determine the organ (s)

responsible for funding public libraries including those in the rural areas. Without effective laws/legislations/policies public libraries may find it difficult to provide effective services that can meet the information needs of rural dwellers.

For that reason, Olden (1985:411) notes that according to UNESCO, there is no country that has succeeded in the provision of effective public library services without a law. In the Nigerian context, library boards are established either by legislation, decree or edict which requires that the library shall operate in the headquarters along with divisional/branch libraries (Opara 2008:351). The headquarters are located in the state capital, while the divisional and branch libraries operate in urban centers, semi urban centers and rural areas. Under these laws, a board is constituted comprising members who made a remarkable achievement in their professions or businesses, who are as well interested in library development. The main function of the board is to make policies that will support the library management in its plans, budget proposals and other activities (Olden 1985:411).

However, in Nigeria, Opara (2008:351) observes that beside the public libraries established by the state government, very few local government councils established such libraries due to the absence of legislation from house of assemblies requiring them to do so. In this regard, the responsibility of establishing public libraries in the rural areas is heavily vested in state governments. However, the majority of these laws that do exist are long overdue for review. The major vexed areas in these laws as observed by Opara (2008:356) are in the appointment of the chief executives, as well as in the composition of the board members. This situation is worse in some states, where non-professionals are being appointed as directors of the library boards. In line with this, Uzuebgu and Onyekweodiri (2011) opined that the Nigerian Library Association (NLA) has an important role to play as a professional body by resisting such appointments and advising the state governments on the need for urgent review of such laws. The NLA is aimed at promoting the establishment and development of libraries, and assisting government in the promotion of library legislation as well (Uzuebgu and Onyekweodiri 2011).

Funding: Adequate funding is required for public libraries to provide sufficient and relevant information resources and services that can meet the information needs of rural dwellers. However, in Nigeria, public libraries are generally confronted with the challenge of poor funding which hampers the provision of public library services in the rural areas (Nwokocha 1998). Poor funding of public libraries is a problem that has adversely affected the provision

of public library services including those in the rural areas. Ntui (2005) observed that in the last decade, public libraries in Nigeria have been in a critical condition due to poor funding.

Research carried out by Opara (2008:352) confirmed that in Nigeria, public libraries were not adequately funded, in fact all other problems of these libraries emanate from poor funding. This challenge is attributed to the lack of government commitment, lack of public-private partnership, as well as the appointment of non-librarians as board members (Azubogu, Obichere and Anyanwu 2009). Consequently, this has not only adversely affected the quality of the library services delivery, but also affected the public trust and confidence in these libraries (Igiamohand Ogunwemimo 2013).

Against this background, research by Iwe (2003), Ntui (2005), Opara (2008), Folorunso and Folorunso (2010) and Igiamoh and Ogunwemimo (2013) suggested that the public library system in Nigeria needs proper funding through adequate budgetary allocation to support the library activities in terms of provision of resources (human and material) and effective services in the rural areas. The libraries on their part should also devise other means of generating funds internally (such as gifts and private contributions, endowments, etc.). These would in no small measure enable them to provide adequate and relevant information resources and services. These means would also enable public libraries to employ adequate and qualified library staff that can provide effective information services to rural dwellers.

Staffing: Library staffs are essential in the provision of effective public library services that can meet the information needs of rural dwellers. Their positionin the provision of effective and appropriate public library services in rural communities cannot be over emphasized. Staffing is therefore a necessary task that should be given the necessary attention by the library managements for vibrant services in rural communities. As such, public libraries in the rural areas need to be equipped with well-trained staff having the necessary expertise that will enable them to discharge their duties effectively and efficiently. According to Nwokocha (1998:101), the public library like any other organization, needs adequate, well trained, dedicated and experienced personnel to carry out the library services effectively and efficiently. The quality of library staff should not be compromised in the provision of public library services in the rural communities. In concurrence with this, Eze (2012:1) adduces that the public libraries in the rural areas do not only need adequate, well-trained and dedicated staff, but the staffing should also be made up of different categories to run the affairs of the

libraries smoothly and efficiently. In this regard, Eze (2012:1) suggests that staffing in public libraries be consisted of:

> Director of library services followed by the assistant chief librarian or deputy director. Their subordinates include all categories of librarians, library officers, library assistants, attendants, technicians, and gardeners. These fall under the categories of professionals, para-professionals and non-professionals, all of whom should be qualified in terms of training and certification according to their levels.

Thus, with the exception of the director and her/his deputy, all other categories of staff should be made available in the divisional/branch libraries. However, in the opinion of Opara (2008:356), this is not achievable in Nigeria as a result of poor conditions of service in the country, which is so bad that in some states, public libraries that ought to be headed by professionals are instead headed by para-professionals or even non-professionals including the branch libraries in some local government areas. This scenario was confirmed by John-Okeke and Owoeye (2011:39) when they carried out an overview of public library services in Lagos state, Nigeria which revealed that generally, libraries in the local government areas were headed by non-professionals librarians who lack the necessary qualifications to operate the libraries. In this regard, Igiamoh and Ogunwemimo (2013) noted that unless public librarians were adequately and properly trained with the necessary skills and knowledge that would prepare them for the task ahead, they would never be efficient in discharging their individual responsibilities.

The Librarians' Registration Council of Nigeria [LRCN] (2015) standards and guidelines for public libraries in Nigeria, provides that the categories of staff to be available in each public library should comprise professional librarians, library officers, library assistants, specialist staff, as well as maintenance staff. The provision of these categories of staff in public libraries including those in the rural areas will significantly facilitate the provision of effective information resources and services that can meet the information needs of the rural dwellers.

Information resource development: The concept of information resource development is sometimes interchangeably used with collection development. According to Nwosu and Udo-Anyanwu (2015), the term has been variously termed as ordering, acquisition and collection development depending on the prevailing understanding of its scope and function. Information resource development is *sine qua non* to the provision of effective public library

services in rural communities. In other words, it is an essential task that public libraries must carry out in order to provide relevant information resources that can meet the information needs of rural dwellers.

According to Ifidon (1996) cited in Olaojo and Akewukereke (2006), a focused, positive and consistent collection development strategy is necessary, for materials of a high standard in terms of quality, expression, as well as format to be acquired. To achieve this, Adeyomoye (2011) suggests that public libraries should not neglect to diversify their methods of acquisition which should comprise direct purchase from vendors, soliciting gifts from individuals and organizations, as well as exchanges. However, Giles (2015) notes that in Africa, public libraries mostly depend on European and American book donation programmes. This consequently, impedes rather than ensures access to quality information in the libraries, simply because the materials from these donations are sometimes not relevant to the needs of the library users.

It follows then that information resource development should be guided by an effective collection development policy. It plays a vital role in guiding the acquisition process in public libraries. The policy ensures that relevant information resources that can satisfy the information needs of library users particularly in the rural areas are acquired. In the views of Nwosu and Udo-Anyanwu, (2015), a well formulated collection development policy does not only ensure an effective, unbiased and balanced collection, but also a robust collection in public libraries including those in the rural areas. In the rural areas where the population comprises both literate and illiterate people, unbiased and balanced collections will surely satisfy their information needs. The LRCN (2015) has set standards and guidelines for public libraries in Nigeria, which requires that:

> the policy should have guiding statements on criteria for resource collection, duplication of titles, on weeding and stock taking, discarding and disposal of resources, the procedure for procurement guidelines, donations policy, resource sharing and interlibrary cooperation and digitization policy. The collection management policy can be expanded and reviewed from 3-5 years.

The formats of information resources acquired in a library always determine the effectiveness of its services to the library users. According to Adeleke (2017:1), materials such as print,

audio-visual and electronic format are acquired in public libraries to collect, preserve, organize, retrieve, disseminate, and communicate information. This was the guideline from the LRCN (2015) who suggest that public libraries regardless of where they may be located, should acquire a range of resources in their collections both in print and non-print formats. Issa (1998) cited in Nnadozie et al. (2015:4) emphasizes that the information resources expected to be found in a rural public library should include television, radio, video, gramophone, posters, handbills and others that will enhance public enlightenment among members of the rural communities.

Library buildings: A library building plays a significant role in the provision of effective public library services in the rural communities. In fact, it provides a conducive environment for reading, learning and other information seeking activities for the library users in rural communities. A library building is a physical structure that accommodates collections, staff, users, as well as equipment and other facilities of the library (Unagha 2008:3). In line with this, Opara (2008:354) opines that public library buildings should be adequate both in design and space to accommodate both the library collections and users. As such, issues related to light, ventilation, humidity control and relative quiet should not be overlooked when designing a library building whether in the urban or rural areas (Unagha 2008:3).

In Nigeria, some public libraries have been operating in rented or donated buildings which might not be suitable for the provision of library services. This has been attested to by Saliu (1999) who established that in Nigeria, the public library system was started in donated buildings and collections from individuals. Since then, Opara (2008:354) observed that only a few public library buildings are adequate or in good condition. Opara (2008:354) added that most of these library buildings are dilapidated and forlorn, and their branches in some local government areas are either in rented or donated accommodation. Consequently, the atmosphere in a rented or donated building may have an adverse effect on both the information resources and the library users. The LRCN (2015) has set a standard for proto-type public library buildings in the Nigeria. Thus, the standard provides that:

> The buildings that accommodate public libraries should be designed with the kind of services to be offered in mind. They should be utilitarian, close to other public places as shops, theaters, and cultural centers. They should be centrally located and accessible to all members of the community including the persons with a special ability. Where possible, public library buildings should serve their

communities for meetings, exhibitions and for cultural activities. Specific features that need to be put into consideration when planning for a public library building include; what services the library aims to provide, the size of the library, spaces for the different sections including the e-library and the multimedia center, how to place shelves so as not to crowd the spaces, safety issues, parking space for the clientele and staff and prominent places to mount signposts for the library. The library building should be aesthetically appealing.

Research carried out by John-Okeke and Owoeye (2011:45) as an overview of public library services in Lagos, Nigeria, showed that the library buildings lacked enough space to accommodate more users comfortably. In addition, the library buildings lacked air conditioners for a conducive learning and leisure atmosphere, as well as lacked enough space for recreation. Opara (2008:356) had earlier observed that in most public library buildings in Nigeria, provision has not been made for physically challenged users.

3.9 Challenges associated with the provision of public library services in Nigeria

The provision of public library services in Nigeria is associated with a number of challenges. These challenges are in tandem with those faced by rural in seeking and using information from public libraries. However, studies by Nwokocha (1998); Opara (2008); Folorunso and Folorunso (2010); Omotosho and Okiki (2012); Oyeronke (2012); Akinola et al. (2013); Salman, Mostert, and Mugwisi (2013); Annune, Ezeani and Okafor (2014); Joy and Idowu (2014); Sambo, Hamsetu, Urhefe, and Yakubu (2014); Mamman (2015); Agodi and Obasi (2016) and Adeleke (2017) demonstrated that most public libraries are lagging behind in terms of development because of so many problems which revolved around inadequate funding, inadequate accommodation and bad location, lack of public awareness, inadequate and outdated materials, lack of adequate and qualified staff, as well as inadequate training and retraining programmes for library staff. Other problems includedinadequate number of existing libraries, inappropriate policies, low level of patronage; irrelevant materials; poor perceptions of the institutions by the society; bureaucratic bottlenecks; inadequate skilled librarians in e-resource management, shortage of extension workers, language barriers, lack of motivation, lack of adequate facilities, as well as lack of effective internet /ICT services among others. These challenges have largely affected the provision of public library services in the rural communities in Nigeria. As a result of these challenges public libraries in Nigeria

largely perform below expectation when it comes to meeting their objectives(Abdullahi 2009).

3.10 Summary

This chapter has reviewed the relevant literature on issues related to the provision of public library services in rural areas. The literature revealed that the provision of public library services in rural areas is a global issue that has attracted the attention of many scholars. The reviewed literature indicates that many studies have been carried out on public libraries both in developed and developing countries. This chapter has also reviewed the related literature on the information needs; information sources/channels; information access, and challenges in seeking and using information.

The literature reviewed shows that most of the research on information needs of rural dwellers has been published in Africa and other developing countries. The literature revealed very little research from the USA and other developed countries. This was a gap addressed by the current study through the research questions. The information needs of rural dwellers in Nigeria as captured by the reviewed literature mainly revolve around agriculture, health, education, government awareness, economy, marketing, neighborhood, sanitation, housing, credit/loan facilities. The literature reviewed revealed that the major sources and channels of information were radio, television, friends, family, newspapers, magazines, libraries, town criers, village leaders, religious leaders, market places, hospitals, extension workers and cell phones. Moreover, the literature shows that rural dwellers face many challenges when seeking and using information in Nigeria. Some of the challenges include high illiteracy levels, poor infrastructure, poor publicity of government activities and programmes. Some information sources such as computers, libraries, and information centers were claimed to have been completely lacking in most of the rural areas.

Based on the review of the related studies above, it is apparent that there is an existing knowledge gap in the literature. The review reveals that there is paucity of empirical research focusing on the provision of public library services to meet the information needs of rural dwellers across the globe, hence the originality of the current study. In addition, there is also unavailability of empirical research with a focus on the provision public library services with respect to the North-West zone of Nigeria. These gaps are addressed by the current study

through the research questions using mixed methods approach. Chapter Four discusses the methodology used in carrying out the current study.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

Research is a systematic process through which a researcher collects, analyses and interprets data with a view to increasing his/her knowledge in the area of his/her interest or concern (Leedy and Ormrod 2010:4). According to the World Health Organization [WHO] (2001:1) and Abbas (2015:90), research is aimed at discovering and interpreting new knowledge through a careful search or investigation which should be guided by various beliefs or schools of thought. A methodology, on the other hand, refers to how the researcher tries to find out whatever he/she believes could be logical (Mamabolo 2009:40; Antwi and Hamza 2015: 220). In the opinion of Kothari (2004:7) and Manyerere (2015:81), a research methodology is a systematic way of solving a research problem, hence, a researcher provides the work plan of his/her study. This would enable the researcher to think of the best methods to use in the context of his/her study (Manyerere 2015:81).

4.2 Review of key research paradigms relevant to the study

According to Guba and Lincoln (1994:107) and Scotland (2012:9), a research paradigm is a worldview based on some set of basic beliefs that deal with some certain principles which consist of ontology, epistemology and methods. The purpose of the research paradigm is to guide a researcher to perceive the world based on his/her assumptions and beliefs (Jonker and Pennik 2010 cited in Wahyuni 2012:69). The ontological assumptions are concerned with what constitutes reality (*what is*), epistemological assumptions is to do with how to create, acquire and communicate knowledge (*what it means*), while methodology, on the other hand, is concerned with the *why, what, where, when* and *how* the researcher collects and analyses data (Scotland 2012:9). In the opinion of Manyerere (2015:89), research paradigm is also referred to as research philosophy. The research paradigms, therefore, stand to provide the ontological and epistemological stance of a study (Abbas 2015:90). Bunniss and Kelly (2010) elaborate that:

> Paradigms are sets of beliefs and practices, shared by communities of researchers, which regulate inquiry within disciplines. The various paradigms are characterized by philosophical, epistemological and methodological differences in their approaches to conceptualizing and

conducting research, and in their contribution towards disciplinary knowledge construction.

Research paradigms such as pragmatism, positivism, post-positivism and constructivism/interprevitism, paradigms are discussed in current study due to their relevanceand for better understanding.

Pragmatism: Pragmatism is a research philosophy that can be traced to the early period between 1860 and 1930, escalating to the neopragmatism era from 1960 to the present (Maxcy 2003 cited in Cameron 2009:140). According to Goldkuhl (2004:1), pragmatism is seen as alternative to positivism and anti-positivism. In other words, pragmatism is a research paradigm that is not inclined to any one of the existing philosophies (Mackenzie and Knipe 2006). Scholars belonging to this school of thought are neutral in the 'paradigm war' between the positivist and interpretivist (Tashakkori and Teddlie 1998 cited in Wahyuni 2012:71). In this regard, pragmatism is an approach that is concerned with mixed methods research, where researchers draw from both quantitative and qualitative assumptions in their research (Creswell 2013:39). Ihuah and Eaton (2013:937) are of the view that pragmatism is relevant where research questions do not clearly suggest the adoption of either a positivist or interpretive philosophy in an inquiry.

Positivism: Positivism is regarded as a strategy and approach based on the ontological principle and doctrine that truth and reality are objectively free (Myers 1997; Aliyu et al. 2014:81). This is the reason why researchers using a positivist approach try to test theory in order to understand the phenomena (Myers 1997). Positivists are of the opinion that social events are controlled by universal laws, and the ability of a researcher to discover these laws will determine how he/she can describe, predict and control social phenomena (Tuli 2011:103). This is in contrast to the interpretivist philosophy where a researcher seeks to understand values, beliefs and meaning of social phenomena (Tuli 2011:103). According to Creswell (2009) cited in Wahyuni (2012:71), in the positivist approach it is assumed that if different researchers are observing the same factual problem and using a large sample they are expected to eventually get a similar result provided that they carefully use statistical tests and employ a similar research process in their investigation. Positivists therefore objectively discover absolute knowledge about a reality (Scotland 2012:10). In positivism, the meaning which a researcher tries to obtain is found in objects, but not in the conscience of the researcher (Scotland 2012:10).

In the current study, the positivist philosophy was found to be helpful in finding out the reality about the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria. According to Aliyu et al. (2014: 82), the idea of positivism was believed to have come into being in the later part of the 19th century. Positivism is a means of discovering social reality on the basis of philosophical ideas of the French Philosopher, Auguste Comte (Antwi and Hamza 2015:218). Comte believed that human behaviour can best be understood through observation and reason (Antwi and Hamza 2015:218). The foci in positivist philosophy are generally centered on what really exists with in relation to the causes and consequences of phenomena in the social world (Denscombe 2014:2).

Post-positivism: According to Hudson and Ozanne (1988) cited in Harrison and Reilly (2011:8), an important assumption guiding post-positivist research is that it ensures an objective view of reality, where research is aimed at measuring, explaining, or creating knowledge that can be generalize across different people, time and place. In the opinion of Creswell (2009:7) cited in Scotland (2012:10), in post-positivism, knowledge is tentative, hypotheses are not proven but simply not rejected. Post-positivists always try to understand the link in a relationship and as such experimentation and correlational studies are used (Scotland 2012:10). Post-positivism is different from positivism in such a way that researchers often seek participants' perspectives in their inquiry not just collecting the sense-data (Scotland 2012:10). In the opinion of Wahyuni (2012:71), a researcher needs to frame his/her understanding of social reality on the basis of relevant law or dynamic social structures. As such post-positivists challenge the belief of positivists of absolute truth, especially when it comes to studying human behaviour in social science (Wahyuni 2012:71). In the current study, this philosophy was also found to be helpful in understanding the relevant laws/policies and structures guiding the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria.

Constructivism/Interpretivism: Constructivism and interpretivism are terms that are used interchangeably. According to Wahyuni (2012:71), interpretivists assume that reality is constructed by social actors (individuals) in relation to their perceptions. According to Wahyuni (2012:71), the philosophy enables interpretivists to understand individuals with different backgrounds, assumptions and experiences in the construction of reality that exists through their social interaction. Based on interpretivist philosophical assumption, Bunniss

and Kelly (2010) argued that no study can be entirely bias-free; therefore, from the onset it would not be the intention of the research to eliminate bias. In concurrence with this, Denscombe (2014:2) concurred that the interprevist paradigm is contrary to the idea that social researchers can understand things from an objective position; instead, social reality is viewed from subjective point of view. In this regard, Myers (1997) states that interpretivists believe that reality can only be obtained via social constructions such as language, consciousness and shared meanings. The meaning on the other hand, is only constructed from the knowledge generated through the researcher-participant interaction (Bunniss and Kelly 2010).

Accordingly, Myers (1997) cited inManyerere (2015:91) asserts that interpretive researches generally try to understand phenomena through the meanings that people assign to them. However, Thanh and Thanh (2015:25) argue that in the interpretivist approach researchers do not accept the existence of universal standards for research, instead, they approach reality from the subjects of their study, who they believe have the experiences. In this regard, this approach was found to be adequate in the current study in understanding meaning that authorities of public libraries give to the information needs of rural dwellers in the North-Western zone of Nigeria, thereby providing services that can meet those needs.

4.3 Research paradigm adopted

The research paradigm adopted in the current study was pragmatism. Therefore, the current study was guided and underpinned by pragmatic research approach.This approach was considered appropriate and adequate owing to the adoption of mixed methods research approach in the study.The main objective of mixed methods approach was not to substitute either of the two approaches, but rather to attract from the strengths and reduce the weaknesses of both in single research studies (Johnson and Onwuegbuzie 2004:14). The pragmatism on the other hand is concerned with mixed methods research, where researchers draw from both quantitative and qualitative assumptions in their research (Creswell 2013:39). This approach was adoptedin the current study owing to the need of integrating the results obtained from the qualitative and quantitative phases. In other words, the combination of positivism and interpretivism necessitated the adoption of pragmatic approachin the study due to the nature of the research questions which the study sought to answer.

4.4 Research methods

In the current study, mixed methods research was employed. According to Johnson and Onwuegbuzie (2004) cited in Yin (2006:41), mixed methods research is a mixed or combination of quantitative and qualitative research technique into a single study. Creswell and Zhang (2009:612) have identified mixed methods research as having three basic characteristics. First; it involves the collection and analysis of both quantitative and qualitative data. Second, the quantitative and qualitative data collection must be rigorous and must follow procedures for good research designs. These involve criteria used in drawing the sample size, the sources of data and other concerns such as fidelity of procedures, access and permission. Third, an important part of mixed methods research is the integration of quantitative and qualitative data. Creswell et al. (2011:4) described mixed methods research as a research approach or methodology that:

i.   Focuses on research questions that call for real-life contextual understandings, multi-level perspectives and cultural influences;

ii. Employs rigorous quantitative research assessing magnitude and frequency of constructs and rigorous qualitative research exploring the meaning and understanding of constructs;

iii. Utilises multiple methods (for example, intervention trials and in-depth interviews);

iv. Intentionally integrates or combines these methods to draw on the strengths of each; and

v.   Frames the investigation within philosophical and theoretical positions.

Further, Venkatesh, Brown, and Bala (2013:21) concurred that in the mixed methods research approach, researchers combine both quantitative and qualitative research methods in the same research inquiry. This accordingly helps researchers to develop rich insights into various phenomena of interest to them that could not have been fully understood using only a quantitative or qualitative method. Thus, mixed methods research is an approach where both the quantitative and qualitative data are collected in the same inquiry (Creswell and Zhang 2009:612; Creswell 2013:4). At the phase of data analysis, Teddlie and Tashakkori (2009:8) elaborate that mixed methods data analysis involves the combination of statistical and thematic data analytic techniques.

4.5 Research design

In the current study, the research design adopted in carrying out the study was exploratory sequential mixed methods design. According to Creswell and Zhang (2009:612), in an exploratory sequential design, the attention of the researcher is first of all, on a construct; after the initial qualitative exploration, the researcher then builds it on with a quantitative data collection phase. In exploratory sequential mixed methods design, it is assumed that the researcher will use the quantitative data consistently, where the quantitative component will significantly assist him/her in the interpretation of qualitative findings (Stoller et al. 2009: 66). This was in line with the suggestion made by Harrison and Reilly (2011:12) that in exploratory designs, researchers first collect and analyse the qualitative data, and then build on the quantitative data. In this approach, the researcher first begins with a qualitative research phase, and then he/she uses the information obtained to build on a second quantitative phase (Creswell 2013:44).

In the current study therefore, the qualitative data obtained from directors of the states' library boards in the North-Western zone of Nigeria was used to build on the quantitative data obtained from both the heads of the branch public libraries in the local government areas in the zone, as well as from the library users (of the age of 18 years and above). In so doing, the researcher was able to compile the research findings.

4.6 Population of the study

Population refers to all the items in the category of things that are being researched (Denscombe 2014:21). It is the aggregate of all elements that conform to some designated set of specifications that are of interest to the researcher (Ifidon and Ifidon 2007). The targeted population of the current study comprised of three groups. The first group consisted of five directors of states library boards in the North-Western zone of Nigeria. The second group consisted of 52 heads of functional branch/public libraries in the local government areas in the same zone. Branch/public libraries in local government areas are established and controlled by the states library boards. They are established to cater for the information needs of rural communities. The third group consisted of 10 574 registered library users.

There are seven states in the North-Western zone of Nigeria which include Kaduna, Kano, Sokoto, Katsina, Jigawa, Kebbi and Zamfara. However, presently only five states out of the total number have functional branch/public libraries in their local government areas. The

branch/public libraries in Kano and Sokoto states were not functional when the officials of the two states library boards were contacted by the researcher. However, the branch/public libraries in Kano state had later resumed operations before the commencement of the pre-test measure of the research instruments of the current study. Therefore, the current study covered only the five states with functional branch/public libraries. The target population of this study consisted of five directors of the state library boards, 52 heads of the branch/public libraries and 10 574 registered library users. Table 4.6.1 below shows the relative population from each of the 5 states under study:

Table 4.6.1: Population of the study

S/N	Total number of states in the north-western zone of Nigeria	Total number of directors of the state library boards	Total number of heads of functional public libraries in the local government areas	Total number of registered library users
1.	Kaduna State	1	9	950
2.	Kano State	The branch public libraries in this State were shut down for renovation and general re-organisation		
3.	Sokoto State	The branch public libraries in this State were yet to be operational		
4	Katsina State	1	22	1,113
5	Jigawa State	1	14	3,037
6	Kebbi State	1	5	2,456
7	Zamfara State	1	2	3,018
Total		**5**	**52**	**10,574**
Grand Total		**10,631**		

(**Source:** personal contacts with the officials of the library boards of Kaduna, Katsina, Jigawa, Kebbi and Zamfara states, August 2016)

4.6 Sampling procedures

Sampling is a technique that determines the assumption made by the researcher which is central to the real findings (Collins, Onwuegbuzie and Jiao 2006:83). In both quantitative and qualitative studies, researchers need to draw the representative sample size using the appropriate criteria (Collins et al. 2006:83). According to Onwuegbuzie and Collins (2007: 281), sampling is the process of selecting a portion from the total population of the study that is representative of a whole. In mixed methods research, researchers must decide the appropriate sample sizes for both the qualitative and quantitative components from a larger population (Onwuegbuzie et al. 2007: 287; Davies and Hughes 2014:158). In this procedure, the researcher draws a sample when the population is large in order to ensure that the subjects included in the sample are representative of the population (Abbas 2015:104).

The participants for the current study were recruited from the three groups of the study population. In this regard, all the five directors of the states' library boards were automatically recruited (because their population is small). Similarly, all the 52 heads of functional branch/public libraries in the local government across the study area were also recruited automatically (because their population is small as well). A sample of 370 participants was recruited from the 10,574 registered library users, using Krejcie and Morgan's (1970) theory of determining the sample size. Because the population of the library users was very large, sampling was necessary. According to Krejcie and Morgan's (1970) theory of determining the sample size, if the total population of a study fell between 10 000 and 14 999, then the sample should be 370 participants.

To ensure proportional representativeness in the sample size, a proportionate random sampling technique (criteria) was used to recruit the 370 participants from the total number of registered library users across all the 52 functional branch/public libraries in the study area. According to Abbas (2009), in the proportionate random sampling technique the researcher does not leave the representativeness of the sample entirely to chance. This will also ensure that the sample is similar to the population of the study in certain respects. Thus, in recruiting the 370 participants from the registered library users proportionately, the researcher used a formula recommended by Krejcie and Morgan's (1970) theory of determining the sample size as presented below:

$$\frac{N \times S}{TP}$$

Where

N = Number (population from each state)

S = Sample (total sample size)

TP = Total Population

Thus, the sample size for the library users in each of the five states under study is proportionately calculated as follows, and presented in Table 1.8.2 below:

Kaduna State $\quad \frac{950}{10,574} \times 370 = 32.69$ (**33**)

Katsina State $\quad \frac{1,113}{10,574} \times 370 = 38.95$ (**39**)

Jigawa State $\quad \frac{3,037}{} \times 370 = 106.27$ (**106**)

10,574

Kebbi State   2,456 x 370 = 85.94 (**85**)
        10,574

Zamfara State 3,081 x 370 = 107.81 (**107**)
        10,574

Total = 370

Table 4.6.2: Sample Size of the Study

S/N	State	Number of participants from each state under study					
		Kaduna	**Katsina**	**Jigawa**	**Kebbi**	**Zamfara**	**Total**
1	Directors of state library boards	1	1	1	1	1	**5**
2	Heads of public libraries in the local government areas	9	22	14	5	2	**52**
3	Library users	33	39	106	85	107	**370**
						Grand Total	**427**

Table 4.6.2 above indicates that the total sample size (number of participants) in the study comprised five directors of states library boards, 52 heads of functional branch/public libraries in the local government areas, and 370 library users. Thus, the total sample size for the study was 427 participants.

4.7 Data collection procedures

The research instruments employed for data collection in the current study were interviews, observation and questionnaires.

Interviews: In the current study, interviews were used to collect the qualitative data from the participants of the study. All the directors of the five state library boards that have functional public libraries in the local government areas were interviewed. The directors of the state library boards are among the policy makers of public libraries. They are the custodians of these policies and they ensure the effective implementation of the policies. According Cassell and Symon (2004:11), the qualitative interview is a method of data collection used in gathering information about the experience of the participant in relation to his/her interpretation of the meaning of the described phenomena. In this procedure, the researchers involve participants in talking about their views (Kajornboon 2005:1). The participants are given the opportunity to discuss their perceptions and interpretations of a given situation (Kajornboon 2005:1). During an interview session, open-ended questions are used to elicit in-

depth information with regards to participants' experiences and viewpoints on a particular topic (Hoepfl 1997; Turner 2010:754). Interviews were adopted in this study because they enabled the researcher to collect in-depth and meaning-making data (Frels and Onwuegbuzie 2013).

According to Morse (1991) and Kajornboon (2005:1), qualitative interviews can either be structured, semi-structured, unstructured or non-directive interviews. Thus, the qualitative interviews adopted in the current study were semi-structured.According to DiCicco-Bloom and Crabtree (2006), semi-structured interviews were generally conducted in a form of predetermined open-ended questions, but other questions may emerge from the conversation between the researcher and the participant. Another advantage of semi-structured interviews is that they are in-depth in sharing the experiences of participants and the meanings they give to such experiences (Tong, Sainsbury and Craig 2007:351). Semi-structured interviews do not only involve several key questions, mostly open-ended, which enable the researcher to define the areas of research interest, but they also enable both the researcher and the participant to ssek for more details (Britten 1995; Gill et al. 2008:291). According to Brinkmann (2014), most qualitative interviews that are commonly used are unstructured and semi-structured interviews.

In qualitative interviews, researchers use an interview guide that is expected to outline the main topics to cover. King and Horrocks (2010:35). (Hoepfl 1997) and Kajornboon (2005:3) stated that an interview guide is a list of questions, general topics, and issues that the researcher wants to explore during the interview. It is flexible in terms of choosing the right questions and the order in which questions are asked, and this will enable the participant to lead the conversation in unexpected directions (King and Horrocks 2010:35). In the current study therefore, the interview guide consisted of seven (7) major sections or topics which include:

A. Demographic information on the participants;
B. The laws/policy establishing the libraries;
C. How does the law/policy cover these areas (funding, buildings, staffing, information resources, information services, facilities, and equipment);
D. Information sources available for rural dwellers;
E. Types of information services provided to rural dwellers;
F. Challenges affecting the provision of public library services in rural areas; and

G. How the challenges can be addressed.

In the current study, face-to-face interviews were conducted personally by the researcher with all the five (5) directors of the State Library Boards that were participating in this study. A tape recorder and field notes were used to record the interviews. Face-to-face interviews have long been the widely used technique in the field of qualitative research (Opdenakker 2006). Rowley (2012:260) asserted that by interviews is implied face-to-face conversation in which the interviewer tries to elicit information from the innterviewee. The interviewee may be invited to share their attitudes, beliefs, behaviours or experiences, as a citizen, user, consumer or employee with the interviewer (Rowley 2012:260).

Observation method: In the current study, observation was also employed using field notes to record the data. According to Ifidon and Ifidon (2007), observation is a method of collecting open-ended and first-hand information by observing participants' behaviour and places at a research site. This includes collecting data when a participant manifests some form of behaviour while an event is taking place (Abbas 2009). The observational notes on the other hand, bear the events experienced principally by the observer through watching and listening (Pickard 2013:238-239). In the current study, the researcher physically observed the quality, and quantity of information resources, services, staffing, buildings, users as well as other library facilities available in the public libraries in the local government areas under study. This is in line with the suggestion made by Merriam and Tisdell (2015:138) that observation should be employed as a research instrument, provided that it is systematic in addressing a specific research question and it is also subject to objectivity in producing trustworthy results.

Questionnaire: In the current study, a questionnaire was also adopted for collecting the quantitative data. According to Wilkinson and Birmingham (2003:8), when questionnaires are used, sufficient data from a number of respondents can be collected. They added that questionnaires have so many advantages over other forms of data collection:

i. They are usually cheap to administer;
ii. Very little training is required to develop them; and
iii. They are easy and so fast to be analysed once completed.

Accordingly, the questionnaires could either be structured, unstructured or a mixture of both (Zohrabi 2013:254). Wilkinson and Birmingham (2003:11) described a structured

questionnaire as a research instrument that contains closed questions with possible answers provided by the researcher. A structured questionnaire provides the inquirer with quantitative or numerical data which is easy to analyse (Zohrabi 2013:254). On the other hand, Rowley (2014:314) described closed-ended questionnaire as not only quick for respondents to answer, but also increase the response rate. In the current study, a mixture of structured and unstructured questionnaire susing Likert scaling technique was adopted. In this scale the respondents were asked to respond to each of the statements in terms of various degrees which include: Agree; Strongly Agree; Disagree; Strongly Disagree; Undecided, as well asthe 'others please specify' category. The use of this scale enabled the study to address the research questions. Siddiqi and Memon (2016) have identified the following advantages of the Likert scale:

i.   It requires little effort to be constructed;
ii. The Likert-type scale is the most reliable because under it the respondents indicate their response on each statement included in the instrument;
iii. It is one of the best techniques for quantifying attitudes;
iv. The Likert-type scale is easy to be used in respondent centered and stimulus centered studies, that is., through which we can study how responses differ between people and how responses differ between stimuli; and
v.   It takes less time to construct a Likert scale.

Furthermore, in the current study, two sets ofquestionnaires one for each, were adopted for the heads of public libraries in the local government areas and the library users respectively. Both questionnaires were self-administered. The library users were of two (2) categories; the literates and the illiterates. In Nigeria, the majority of rural dwellers are illiterates that cannot read or write in any language. In such a situation, Sousa and Rojjanasrirat (2011:269) suggested that the questionnaire in the source (original) language should be translated into the target language (TL) by at least two independent translators whose mother language is the desired TL.

The source language of the research instrument in this study is English and the target language is Hausa, as such the research instrument was translated by two independent translators. The Hausa language was chosen because it is the predominant native language spoken in the entire North-Western zone of Nigeria. Therefore, the questionnaire was translated from English language (which is the source language) into the Hausa language

(which is the target language) for the illiterate library users. The translated instrument was also read out to the illiterate participants at the site of data collection for effective responses. The researcher therefore, personally administered the research instruments, and employed research assistants in each state under study in the administration of the questionnaires. The research assistants were also trained on how to administer both the English and Hausa translated questionnaires.

The questionnaire for the heads of public libraries in the local government areas under study consisted of ten (10) items which included:

A. Demographic information on the respondents;
B. The users of the libraries;
C. The areas of information needs of library users as rural dwellers;
D. The library services provided to the library users;
E. The channels used by public libraries in disseminating information to rural dwellers;
F. How adequate and effective are the information resources in public libraries to meet the needs of rural dwellers;
G. Facilities available in the libraries;
H. The infrastructural facilities available in rural areas;
I. The challenges associated with the provision of public library services in rural areas; and
J. Ways in which the challenges could be addressed.

Similarly, the questionnaire for the library users consisted of eight (8) items which included:

A. Demographic information on the respondents;
B. Areas of information needs of rural dwellers;
C. The impact of library services on the lives of the rural dwellers;
D. The information sources available in public libraries;
E. Skills used by the rural dwellers to find, access and use information;
F. The infrastructural facilities available in the rural areas;
G. The challenges faced by the rural dwellers in seeking and using information from public libraries; and
H. Ways in which the challenges could be addressed.

4.8 Data processing and data analysis

In the current study, the qualitative data collected from the interviews were analysed using NVivo software (version 11), thematic and content analysis. Thematic analysis is a process through which patterns (themes) can be identified, analysed and reported within the qualitative data (Braun and Clarke 2006). Manyerere (2015:111) pointed out that when thematic analysis is used in qualitative data analysis, the researcher or analyst will be able to move back and forth between data and new concepts. NVivo software in the other hand, is also efficient for managing data as it allows for an increased focus by way of considering the meaning of a recorded data (Bazeley and Jackson 2013:2). The data were analysed using NVivo by importing sources, by coding and analysing the data using nodes, classification, memos and queries etc. for a better understanding, time saving and excellent visualisation of the research findings. In the current study, content analysis was also used to analyse the data obtained through observation. Content analysis consists of analysing the content of information items such as books, magazines, newspapers, and the content of all other verbal information (Kothari 2004:110).

The quantitative data collected were analysed using the Statistical Package for Social Science (SPSS IBM version 23) software and descriptive statistical analysis. SPSS is described as a powerful, comprehensive and flexible general-purpose data analysis package (Pickard 2013:304). In addition, tables were used to complement the descriptive statistics and the qualitative data collected. Descriptive statistics are associated with development of certain indices from the raw data (Kothari 2004:131). Abbas (2015:110) stated that when descriptive statistics are used it enables the researcher to use percentages and frequencies. The responses were coded and then entered into SPSS for analysis.

4.9 Validity and reliability of data collection instruments

In the current study, the validity and reliability are ensured for the trustworthiness and credibility of the research instruments and findings. Validity is described by Fraenkel, Wallen, Hyun (1993) as the degree to which the researcher makes correct inferences on the basis of results obtained from the research instrument. Golafshani (2003:559) and Anastasi (1982) cited in Switzeret al. (1999:403) and Kimberlin and Winterstein (2008:2278) asserted that validity is a process through which the researcher ensures that the research instrument truly measures what it was intended to measure, as well as ensures the trustworthiness and credibility of the research results. Thus, validity refers to the extent to which the observation

and the research findings are a close accurate representation of the phenomenon being studied (Davies and Hughes 2014:160). Therefore, validity and reliability are essential in determining the worthiness and acceptability of research findings (Abbas 2015:111).

The credibility is the linkage between the experiences of groups of participants and the concepts that researchers use to recreate through interpretation (Baxter and Eyles 1997:512). Validity, therefore, ensures that the research instrument is reliable in measuring what it is expected to measure (Kimberlin and Winterstein 2008:2278). Before the commencement of the study the researcher presented the research instruments to a subject librarian in UKZN Library, as well as to some professional colleagues in the Department of Library and Information Science of Umaru Musa Yar'adua University, Katsina, Nigeria, who are also experienced public librarians for pretesting. In addition, the development of the research instruments was based on the review of the available related literature. This was to ensure that ambiguous questions or questions that might lead to biased answers were removed (Abbas 2015:112).

On the other hand, reliability is all about the evaluation of measurement accuracy (Cronbach 1951; cited in Straub 1989:151). It ensures that the degree to which the scores obtained and measured by the research instruments are consistent (Fraenkel, Wallen and Hyun 1993). In addition, it does not only ensure consistency in the results obtained over time, but it also ensures acceptable representation of the entire population under study (Joppe 2000; cited in Golafshani 2003:558). Should the results of a study be reproduced under a similar methodology, the research instrument should be reliable in providing the same results.

Accordingly, Kimberlin and Winsterstein (2008:2277) are of the opinion that reliability is any score obtained by a measuring instrument, composed of both the 'true' score, which is unknown and 'error' in the measurement process. The true score is essentially the score that the researcher would have received if the measurement was perfectly accurate (Kimberlin and Winsterstein 2008:2277). To ensure consistency of a measure in the results obtained, it is important for a researcher to test his or her survey instruments before using it for data collection (Davies and Hughes 2014:158; Abbas 2015:112).

In the current study, a 'pre-test' measure was used to ensure the trustworthiness and credibility of the research instruments (for both the quantitative data). Creswell (2013:236) suggested that in carrying out a pre-test and post-test measure, a researcher can use the same instruments. In this regard, a pre-test of the research instruments was carried out. A pre-test

interview was conducted with the director of Kano state library board. Similarly, ten (10) questionnaires were administered to heads of branch/public libraries in some local government areas in the state. In addition, thirty (30) questionnaires were also administered to some library users in those libraries which were not part of the sample of the current study. This enabled the researcher to ensure the reliability of the research instruments prior to the commencement of the study. The pre-test also helped the researcher to ensure that the research instruments used in the study were not only reliable but also valid in measuring the results obtained.

Result of reliability test for the research instruments: The two sets of questionnaires (Appendix II and Appendix III) were administered independently to 10 heads of branch/public libraries in some local government areas in Kano state, as well as 30 library users respectively. The data collected were coded and subjected to statistical analysis to determine the reliability of the instruments and internal consistency of the items. The test was conducted with the Statistical Package for the Social Sciences (SPSS IBM version 23). The Cronbach's Alpha option as recommended by Field (2006) was selected because of the interval scaling used in the two research instruments (Appendix II and Appendix III). The observed reliability obtained for the Appendix II instrument was 0.895. For appendix III instrument the observed reliability index was 0.925. For the Cronbach's Alpha the internal consistency coefficient is the same with the reliability coefficient. The obtained reliability coefficients all indicated that the instruments could be considered reliable and internally consistent for the study. This observation is consistent with Field's (2006) recommendations that the reliability coefficient of between 0.5 and 1 is expected to be obtained for an instrument which would imply that it is reliable and internally consistent for a study. The reliability processing summary for Appendix II and Appendix III are presented in Table 4.9.1.1 and Table 4.0.1.2 respectively below:

Table 4.9.1.1: Reliability processing summary for appendix II (N=10)

Case Processing Summary

		N	%
Cases	Valid	10	3.0
	Excluded[a]	322	97.0
	Total	332	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.895	119

Table 4.9.1.2: Reliability processing summary for appendix III (N=30)

Case Processing Summary

		N	%
Cases	Valid	30	9.0
	Excluded[a]	302	91.0
	Total	332	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.925	112

4.10 Ethical considerations

According to Israel and Hay (2006) cited in Abbas (2015:114), ethical issues are essential in any research, where a researcher while conducting his/her research must protect the participants, develop trust with them and promote the integrity of the research findings. Abbas (2015:114) added that in any study, it is important for the researcher to note two important concepts, namely anonymity and confidentiality. The researcher must hide the

identity of the respondents, though the names can be matched with responses on condition that nobody will have access to them (Abbas 2015:114).

In the current study, the ethical requirements of the University of KwaZulu-Natal were strictly adhered to. In this regard, during the data collection process the researcher explained the main purpose of the current study to the participants/respondents for clarification, with a view to reassuring them of total confidentiality and developing trust with them. They were helped to understand that the information elicited from them would be used strictly for academic purposes only. Informed consent forms were introduced to the participant/respondents in order to obtain their consent for participation in the current research. This was also to assure them of their anonymity and also assure them of their right to withdraw from the research at any time without any consequences if doing so. According to Mandal and Parija (2014:78), the informed consent form is an important doctrine for any research based on the principles of autonomy and self-determination of the participants. Mandal and Parija (2014:78) added that by signing the informed consent form a participant voluntarily confirms his/her willingness to participate in a study, having been informed about all aspects of the study.

The researcher was granted the permission by all the state library boards with functional branch/public libraries in their local government areas to carry out the research in the study area. The permission granted was conveyed in the gate permission letters by the authorities of Kaduna State Library Board; Katsina State Library Board; Jigawa State Library Board; Kebbi State Library Board; and Zamfara State Library Board. Similarly, the researcher was given the ethical clearance by the Humanities and Social Science Research Committee of UKZN. This was conveyed in an approval letter (Protocol reference number: HSS/0808/017D) dated 24 August 2017. In addition, an informed consent form was presented to all the participants/respondents of the study and was duly signed by them before the commencement of the data collection. All the participants/respondents were given the assurance that the information they gave is confidential and they have the right to withdraw at any point in time of the study, for any reason without consequences.

4.11 Evaluation of the research methodology

Evaluation is a process of examining and judging the accomplishment and effectiveness of something (Patton 1990). In the opinion of Mark and Henry (2004:35), evaluation is closely

related to types of endeavours that influence people's way of life. In the context of the current study, by evaluation of research method, it implies that the researcher justified the criteria he used in judging the relevance of the methodology used in collecting data for the study. Thus, evaluation in research entails the consideration of the logic behind the adoption of a particular research method (s) by a researcher in the context of his/her study and the rationale behind the adoption of that particular research method (s) or technique (s) upon others (Kothari 2004:8).

According to Garaba (2010:182), it is a well-known fact that every research method either qualitative or quantitative has its own weaknesses and strengths. This was the rationale behind the introduction of mixed methods approach in which inquirers draw liberally from both quantitative and qualitative assumptions (Creswell 2013:39). For this reason, a researcher needs to understand the research approach that he/she adopts in carrying out his/her research for credibility of the findings. The main objective of mixed methods approach was not to substitute either of the two approaches, but rather to attract from the strengths and reduce the weaknesses of both in single research studies (Johnson and Onwuegbuzie 2004:14). In this regard, the use of mixed methods approach enables a researcher to develop a clear understanding of various phenomena of his/her interest that could not have been fully understood using only a single approach (Venkatesh, Brown and Bala 2013:21). In a study conducted by Garaba (2010), it was indicated that the researcher used more than one method in carrying out that study because of the need to enhance validity and reliability of the findings.

Within the mixed methods, pragmatic approach and sequential exploratory design were employed to examine the provision of public library services to meet the information needs of rural dwellers with respect to the North-Western zone of Nigeria. This methodology was chosen because of the need to integrate the results obtained from the qualitative and quantitative phases. In the current study, the data obtained from the qualitative and quantitative phases was elicited from three categories of participants (as shown in section 4.6). This was to ensure the credibility of the research findings. The combination of qualitative and quantitative research in this study enabled the researcher to determine whether or not the information needs of the rural dwellers in question are met in relation to the kinds of public library services provided.

Accordingly, the evaluation of the research method in the current study was based on the research approach and research design used. The research design was organized based on the research instruments used, theoretical framework, the time and other resources available in carrying out the research. From experience, the researcher of the current study would prefer to use interviews and observations if given the opportunity to carry out the same study again. This was because of the major challenge (s) involved in the use of questionnaire. The use of questionnaire in the current study was challenging in terms of reliability due to the nature of the illiterate library users. This category of users found it difficult to fill in the translated research instrument themselves due to their level of literacy; as such the instrument had to be read out to them for their effective responses at the site of the study. In addition, the use of questionnaire was also found to be unreliable even among the category of the literate library users because of the time it took a participant to fill in the instrument, unlike interviews and observation which were faster and more reliable in collecting data.

From the foregoing therefore, it can be deduced that in a research of this nature, the use of interviews and observations should be considered as the most appropriate than the use of questionnaire. The use of interviews enabled both the researcher and the participant to seek for more clarifications on the underlying issues than the use of questionnaire. However, the use of different instruments for collecting data enhances the validity and reliability of the data and their interpretation (Zohrabi 2013:254). As such, the combination of interviews, observations and questionnaires in this study appeared to be more reliable and credible in the entire research process.

Furthermore, in the current study, a pre-testing of research instruments was carried out to ensure the validity and reliability of the instruments used. In the pre-test, the director of Kano state library board was interviewed, 10 questionnaires were administered to heads of branch/public libraries in some local government areas in the state. In addition, 30 questionnaires were also administered to some library users. All the obtained reliability coefficients indicated that the instruments could be considered reliable and internally consistent for the study (as shown in section 4.9.1).

Finally, the researcher was not able to visit all the states in Nigeria. Consequently, this meant that the results obtained from the use of the interviews, observations and questionnaires were not generalizable to the entire country. Interestingly, these shortcomings did not prevent the current study from coming up with interesting findings that are essential to authorities of

public libraries in the North-Western zone of Nigeria, and Nigeria in general towards revitalizing public library services that can meet the information needs of the rural dwellers.

4.12 Summary

This chapter presented the methodology used in carrying out the current study. It discussed the research paradigms commonly used in social science research and in particular the pragmatism paradigm, which is consistent with mixed methods research design employed for this study. The study used mixed methods which are a combination of both qualitative and quantitative methods. The chapter discussed the population of the study which comprised three groups of participants (as shown in section 4.6). A total of 427 participants were drawn to form the sample size of the study using Krejcie and Morgan's (1970) theory and proportionate sampling technique. The chapter also discussed the instruments used for the study which include interviews, observation and questionnaires. In the data analysis, Nvivo software, thematic analysis and content analysis were used to analyse the qualitative data. Similarly, SPSS software was also used to analyse the quantitative data using descriptive statistics. In addition, the pre-testing of the research instruments for validity and reliability was also discussed in the chapter. All ethical considerations that provided grounding and direction for the study were discussed and strictly adhered to, as well. Finally, the evaluation of the research methodology used in carrying out the study was also highlighted. Chapter Five presents and analyses the empirical data collected for the study.

CHAPTER FIVE

DATA ANALYSIS AND PRESENTATION

5.1 Introduction

This chapter presents and analyses the empirical data obtained from the participants of the study. This is in an attempt to answer the research questions of the current study. The data presented in this chapter was drawn from questionnaires, interviews and observations administered to the participants of the study. The purpose of the current study was to examine the provision of public library services to meet the information needs of rural dwellers in the North- Western zone of Nigeria. With the help of research assistants, the researcher administered 52 and 370 questionnaires to the heads of the branch libraries and library users respectively. The researcher also conducted semi-structured interviews with five directors of the state library boards in the area under study. The interviews were conducted in the offices of the directors at the headquarters of the state library boards. The selection of directors of the library boards as participants in the study was deliberate. This was because they were experienced, part of the policy makers of the libraries as well as the custodians of the policies and provision and maintenance of the libraries. The quantitative and qualitative data on similar themes were integrated where necessary for coherence and avoidance of unnecessary repetition. The current study addressed the following research questions, with respect to the North-Western zone of Nigeria:

1. What are the information needs of the rural dwellers?
2. What skills do rural dwellers effectively use to identify, access and use information from public libraries?
3. What information sources and services are used by rural dwellers to seek and satisfy their information needs from public libraries?
4. What channels are used by the public libraries to disseminate information to the rural dwellers?
5. What challenges are faced by the rural dwellers in seeking and using information from public libraries?

In view of the foregoing, this chapter is organized in accordance with the themes of the research questions, theoretical framework and other issues surrounding the research questions. The quantitative data obtained is presented in statistical tables of frequencies and

percentages. Abbas (2009:88) opined that when organizing or summarizing quantitative data collected, to make meaning, tables, figures and charts should be used. In the current study therefore, a structured questionnaire was adopted based on Likert scaling technique to indicate how many participants agree and how many disagree. The library users were presented with range of answer options to indicate whether they strongly agreed, agreed, strongly disagreed, disagreed or were undecided about each item. Therefore, the responses to each of the items on the questionnaires are presented in tables of frequencies and percentages. Responses on each item on the questionnaires are based on a midpoint average of 3.0 at which response would be regarded as agreement or disagreement. A mean score of magnitude 3.0 and above would therefore indicate agreement while a mean score below 3.0 signifies disagreement. Therefore, both the mean scores and standard deviation are used to determine whether or not there is consensus agreement or disagreement between the opinions of the participants on each of the listed items. Low standard deviation results close to mean and high standard deviation results far away from mean.

Accordingly, results from the interviews and observations were used qualitatively to complement the quantitative data obtained from the heads of the branch libraries and the library users. The interviews were transcribed and were thematic and content analyzed. In circumstances where there were varied opinions between the heads of the branch libraries and the library users on a particular item, the qualitative data was used to confirm the real situation.

5.2 Response rates from the questionnaires administered

The level of response rate in social research is considered a crucial factor in assessing the value of the research findings (Baruch and Holton 2008). At this point every researcher should aim to attain approximately a 60% response rate (Fincham 2008:1). In line with this, the response rate for the current study obtained from the two sets of questionnaires was acceptable. The response rates from the heads of the branch libraries and the library users were 98.1% (51) and 89.7% (332) respectively. This was achieved as a result of the strong follow ups as well as the employment of the research assistants in the administration of the research instruments. Questionnaires (Appendix II) were administered to 52 heads of branch libraries in total. In addition, 370 library users across the five selected states in the area under study were also provided with their set of questionnaires which included the English version and the Hausa translated version (Appendices III and IV). Table 5.1 below shows the number

of questionnaires administered to each of the two groups of participants in the five states under study, as well as the number of returned questionnaires along with the percentage of the response rates.

Table 5.2: Distribution of the participants by states in the zone (N=51/332)

States involved in the study	Questionnaire for the heads of branch libraries			Questionnaire for the library users		
	Administered	Returned	Response rate (%)	Administered	Returned	Response rate (%)
Kaduna	9	8	88.9	33	32	97.0
Katsina	22	22	100.0	39	39	100.0
Jigawa	14	14	100.0	106	87	82.1
Kebbi	5	5	100.0	85	84	98.8
Zamfara	2	2	100.0	107	90	84.1
Total	52	51	98.1	370	332	89.7

The total number of questionnaires administered to the heads of the branch libraries in Kaduna state was nine (9), of which eight (8) were successfully retrieved, giving a response rate of 88.9%. For Katsina state, 22 heads of branch libraries were provided with the questionnaires and all 22 (100.0%) completed questionnaires were retrieved, while 14 questionnaires were administered to the heads of branch libraries in Jigawa state and all 14 (100.0%) were retrieved completed. A total of five (5) questionnaires were administered to the heads of branch libraries in Kebbi state all of which (5 or 100.0%) were duly completed and returned. Of the two (2) issued to the heads of branch libraries in Zamfara state, both (100.0%) were successfully completed and returned. In all, 51 out of the 52 administered questionnaires were duly completed and returned indicating a response rate of 98.1% for the heads of branch libraries.

For the library users, 33 questionnaires were administered in Kaduna state of which 32 (97.0%) were successfully completed and returned. For Katsina state and Jigawa state, the total number of questionnaires administered was 39 and 106 respectively. For Katsina there was a response rate of 100% - all 39 questionnaires were returned, and from Jigawa 87 were returned, a response rate of 82.1%. The number of questionnaires administered to users in Kebbi state and Zamfara state were 85 and 107 respectively. The total number returned were 84 (98.8%) and 90 (84.1%) respectively. In total, 370 were administered and 332 were returned showing an overall response rate of 89.7% for the library users involved in the study.

5.3 Descriptive analysis of the demographic data of the participants

In this section, the socio-demographic characteristics of the heads of branch/public libraries and the library users involved in the study are presented. The selected demographic data variables are sex, age, highest educational qualification along with occupation of the library users. Table 5.3.1 shows the sex distribution of the groups of participants.

Table 5.3.1: Classification of the respondents by gender (N=51/N=332)

Gender	Heads of branch libraries		Library users	
	Frequency	Percent	Frequency	Percent
Male	48	94.1	238	71.7
Female	3	5.9	94	28.3
Total	51	100.0	332	100.0

Table 5.3.1 above indicates that only three (3; 5.9%) of the heads of branch libraries were female. Most of the heads of the branch libraries (48; 94.1%) were male. Of the library users, 238 (71.7%) were male and only 94 (28.3%) were female. Similarly, the qualitative data revealed that four (4; or 80%) of the directors were male, but only one (20%) director was female. Public libraries are expected to serve the needs of every individual in the society regardless of his/her gender. With the inclusion of this variable, the data indicates that gender is a significant factor in the provision and utilization of public library services in the area under study. Table 5.2.2 below shows the age classification of the participants.

Table 5.3.2: Distribution of the participants by their age groupings (N=51/N=332)

Age range	Heads of branch libraries		Age range	Library users	
	Frequency	Percent		Frequency	Percent
25 – 30 years	3	5.9	18 – 27 years	115	34.6
31 – 35 years	3	5.9	28 – 37 years	93	28.0
36 – 40 years	5	9.8	38 – 47 years	77	23.2
41 – 45 years	12	23.5	48 – 57 years	35	10.5
Above 45 years	28	54.9	Above 57 years	12	3.6
Total	51	100.0		332	100.0

Just over half of the heads of branch libraries were above 45 years of age (54.9%), with less than half 42.1% of them below 45 years. This shows that age matters in the headship of the branch libraries. As suggested by the data, the libraries were rarely headed by younger people and the headship was dominated by people above 45 years. Similarly, this indicates that a library staff member has to have some years of experience in the service before appointed as

head of a branch library. The criteria used in the appointment of a head of branch library could perhaps have to do with seniority in the rank and file of the library staff.

For the library users, over one third, 115 (34.6%) were between the ages of 18 and 27 years, while some 93 (28.0%) were between the ages of 28 and 37 years. These two age groupings were found to be the dominant age groupings of the library users. Users above these ranges made up 37.3% as shown in the table. Thus the library users were mostly younger people in the society.

The choice of these age ranges for the library users from 18 years and above in the current study was deliberate, simply because of time and other resource constraints. The age ranges below 18 years involve children require parental consent and child consent. Most of the children in the Northern parts of Nigeria do not come to the libraries with their parents, as such, involving children in a research means reaching out to their parents at their individual households to seek their consent. This requires a lot of time, money and other resources which were found to be among the major constraints involved in carrying out the research. Both the heads of branch libraries and library users were then asked to indicate their highest educational qualification. Thus, the highest educational attainment of the individuals in the two groups (heads of the branch libraries and the library users) is presented in Table 5.3.3 below.

Table 5.3.3: Distribution of the participants by their highest educational qualifications (N=51/N=332)

Highest educational qualifications of the participants	Heads of branch libraries		Library users	
	Frequency	Percent	Frequency	Percent
No formal Schooling	-	-	7	2.1
Non-formal Islamic Education	-	-	22	6.6
Elementary	-	-	6	1.8
O level	-	-	59	17.8
Certificate	13	25.5	31	9.3
Diploma/NCE	33	64.7	93	28.0
Degree/HND	5	9.8	108	32.5
Masters	-	-	6	1.8
Total	51	100.0	332	100.0

Among the heads of the branch libraries, the lowest qualification was a Certificate, obtained by 13 (25.5%) respondents, so all respondents had some form of formal education beyond basic schooling. The heads of branch libraries with a Diploma or Nigerian Certificate in

Education (NCE) numbered 33 (64.7%) while some five of the heads of branch libraries had a Degree or Higher National Diploma (HND).

Among the library user participants, seven (2.1%) said they had no formal schooling while 22 (6.6%) had only non-formal Islamic education. Those with primary school education among the users were six (1.8%) and 59 (17.8%) had secondary school education. Those with certificate courses numbered 31 (9.3%). A certificate course is a post-secondary school certificate obtained between six and nine months as the case may be. The findings show that 93 (28.0%) and 108 (32.5%) of the library users had a Diploma/NCE and a Degree/HND respectively. But only 6 (1.8%) of the users had a master's degrees.

This distribution implies thatmost of the participants that patronize public library services in the rural areas were relatively educated while the number of the illiterate people that patronized the library services was negligible. As will be seen later in this chapter, reasons for non-use of the libraries by the majority of illiterate people were literacy levels, language barriers, nature of information resources and services offered by the libraries and their distance from rural communities, and lack of knowledge about the existence of libraries and economic factors. As such from the data, it indicates that the majority of this category of rural dwellers did not patronize the library services. Table 5.3.4 below shows the number of professional librarians working in public libraries in each state relative to LRCN (2015) minimum standards:

Table 5.3.4: Number of professional librarians working in public libraries in each state under study relative to LRCN (2015) minimum standards

S/N	State	No. of branch libraries	Total number of Professional staff	LRCN (2015) minimum standards
1	Kaduna	9	4	45+
2	Katsina	22	15	110+
3	Jigawa	14	5	70+
4	Kebbi	5	2	25+
5	Zamfara	2	3	10+

(**Source:** Library staff lists and the LRCN [2015] minimum standards and guidelines for public libraries in Nigeria).[1]

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[1]N.B. the LRCN (2015) standards and guidelines for public libraries in Nigeria provided that for any public library serving a population of up to 35, 000+ people in the area of service is recommended to have 5+ professional librarians.

From Table 5.3.4 above, it can be seen that in Kaduna state there are only four professional librarians available working in public libraries in the entire state, far lower than the LRCN recommendations. Katsina state has only 15 professional librarians, Jigawa state has only five, Kebbi state has only two and Zamfara states has only three professional librarians. In most of these states even the few professional librarians were not posted in the branch libraries but remained in the headquarters of the library boards. From the data, it indicates that only 5 (9.8%) heads of branch libraries had a Bachelor's degree (see Table 5.3.3).

The library users were asked to indicate their various occupations. The classification of the library users by their occupation is presented in Table 5.3.4.

Table 5.3.5: Classification of the library users by their respective occupations (N=332)

Occupations of the library users	Frequency	Percent
None	4	13.0
Scholar	6	1.8
Farmer	13	3.9
Student	121	36.4
Housewife	16	4.8
Civil servant	116	34.9
Artisan	4	1.2
Others (unspecified)	13	3.9
Total	332	100.0

Among the library users as reflected in Table 5.3.5 above, four (13.0%) did not indicate their occupations. Only 6 (1.8%) were scholars (Islamic teachers who acquired their Islamic knowledge through informal schooling system) while some 13 (3.9%) were engaged in farming as their primary occupation; 121 (36.4%) were students and 16 (4.8%) were housewives. The civil servants among the library users numbered 116 (34.9%) and four (4) (1.2%) were artisans while 13 (3.9%) were of other unspecified occupations.

The heads of branch libraries were also asked to describe the categories of library users. Table 5.3.5 below shows the heads of branch libraries' identification of the occupations of the library users in frequencies and percentages with mean scores that are rated on a five midpoint scale to indicate the most agreed consensus of categories of users by occupation.

Table 5.3.6: Heads of branch libraries description of the library users (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Who are the users	SA	A	D	SD	UD	Mean	STD

of your library?	F	%	F	%	F	%	F	%	F	%		
Students	39	76.5	10	19.6	-	-	1	2.0	1	2.0	4.7	0.71
Subsistence farmers	13	25.5	24	47.1	4	7.8	6	11.8	4	7.8	3.7	1.20
Large scale farmers	10	19.6	18	35.3	6	11.8	6	11.8	11	21.6	3.2	1.46
Artisans	3	5.9	16	31.4	4	7.8	18	35.3	10	19.6	2.7	1.27
Civil servants	28	54.9	22	43.1	-	-	-	-	1	2.0	4.5	0.70
Literate people	30	58.8	15	29.4	2	3.9	1	2.0	3	5.9	4.3	1.07
Non-literate people	2	3.9	19	37.3	6	11.8	19	37.3	5	9.8	2.9	1.14
People living in terrain areas	3	5.9	14	27.5	7	13.7	21	41.2	6	11.8	2.7	1.16
Adults	34	66.7	15	29.4	1	2.0	-	-	1	2.0	4.6	0.73
Children	28	54.9	19	37.3	-	-	2	3.9	2	3.9	4.4	0.98
Housewives	15	29.4	14	27.5	3	5.9	14	27.5	5	9.8	3.4	1.42
Unemployed	23	45.1	15	29.4	1	2.0	7	13.7	5	9.8	3.9	1.39
Others (teachers, nurses and researchers)	2	3.9	-	-	-	-	3	5.9	46	90.2	1.2	0.81

The participants were provided with a list of occupational categories and asked to indicate whether they strongly agreed, agreed, strongly disagreed, disagreed or were undecided about whether their patrons fell into the listed categories. An additional option called 'Others' was provided for occupations not included in the list. From the responses about the occupations of library users by the heads of the branch libraries represented in Table 5.3.6 above, overall it can be seen that civil servants form the largest category of users of the libraries. As indicated by most (50; 98%) of the heads of branch libraries. Civil servants are followed bythe general category of adults and students within the respective communities. This was revealed by the majority (49; 96.1%) of the heads of the branch libraries. 47 (92.2%) participants indicated that children were next in the ranking followed by the general category of literate people (45; 88.2%) and subsistence farmers (37; 72.1%) and housewives along with large scale famers (28; 54.9%). The data indicates that subsistence farmers also patronized the library services. This was due to the fact that farming is the primary occupation of the rural dwellers.

The data also shows that other categories of persons like non-literate people, artisans and people living in terrain areas virtually do not patronize the library services at all. This is indicated by the less than midpoint (3.0) rating of their usage by the heads of the branch libraries. Unemployed people (jobless) were also indicated as being library users by 38 (74.5%) heads of branch libraries. This could perhaps suggest that the unemployed patronized the library services in search of job vacancies in the dailies. Another reason could be that they might probably patronize the library services for leisure and current affairs with a view to

keeping themselves abreast about day-to-day happenings. The data shows that heads of libraries are generally aware of who their user groups are, as their responses reflect the categories of occupations provided by the library users themselves.

5.4 Information needs of rural dwellers in the North-Western zone of Nigeria

In this section the opinions of the heads of branch libraries and library users were solicited about the information needs of rural dwellers in the area under study. Among the specific objectives in the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria, was an examination of their information needs. This is the focus of the first research question of the current study. Among the information needs enquired about were agriculture, health, economy, government policies, education, culture and recreation, as well as rural development. The opinions of the heads of the branch libraries as well as those of the library users were scored on a five point scale.

Heads of branch libraries and library users were presented with a range of answer options about the eight categories of information needs and asked to indicate for each, whether they strongly agreed, agreed, strongly disagreed, disagreed or were undecided about the information needs. The frequencies and percentages of the responses are shown in the tables of responses of the two groups. To ensure clarity of the results and to enable comparative analysis between the opinions of the two groups on each item, the mean scores along with the standard deviation of the two groups are computed and presented in the same table forthe respective information needs.

The first information need explored was for agricultural information. Table 5.4.1, Table 5.4.2 and Table 5.4.3 below show the responses along with the mean scores and standard deviations of the two groups on the agricultural information needs of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were presented in Table 5.4.3 to enable a comparative analysis and visualize the differences on agricultural information needs in the perspectives of the two groups.

Table 5.4.1: Responses of the heads of the branch libraries on agricultural information needs of the rural dwellers (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Agricultural information needs	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Inputs (fertilizer, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals)	39	76.5	10	19.6	-	-	-	-	2	3.9	4.6	0.84
Farm implements (plough, harrow, cultivators)	31	60.8	18	35.3	-	-	-	-	2	3.9	4.5	0.86
Tractors	30	58.8	13	25.6			4	7.8	4	7.8	4.2	1.27
Machineries (thrasher, winnower, harvester)	24	47.1	20	39.2	2	3.9	1	2.0	4	7.8	4.2	1.14
Farming techniques	28	54.9	14	27.5	3	5.9	2	3.9	4	7.8	4.2	1.21
Agricultural loans and credits	27	52.9	16	31.4	-	-	3	5.9	5	9.8	4.1	1.29
Marketing	26	51.0	14	27.5	-	-	2	3.9	9	17.6	3.9	1.51
Other agricultural information needs(preservation techniques and agricultural shows)	4	7.8	4	7.8	-	-	-	-	43	84.3	1.5	1.30

Table 5.4.2: Responses of the library users on agricultural information needs of the rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Agricultural information needs	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Inputs (fertilizer, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals)	221	66.6	72	21.7	7	2.1	7	2.1	25	7.5	4.4	1.14
Farm implements (plough, harrow, cultivators)	146	44.0	96	28.9	5	1.5	7	2.1	78	23.5	3.7	1.60
Tractors	139	41.9	72	21.7	25	7.5	19	5.7	77	23.2	3.5	1.61

Machineries (thrasher, winnower, harvester)	128	38.6	96	28.9	15	4.5	16	4.8	77	23.2	3.5	1.59
Farming techniques	142	42.8	75	22.6	5	1.5	27	8.1	83	25.0	3.5	1.67
Agricultural loans and credits	172	51.8	72	21.7	6	1.8	4	1.2	78	23.5	3.8	1.63
Marketing	131	39.5	56	16.9	1	0.3	8	2.4	136	41.0	3.1	1.85
Other agricultural information needs (agricultural shows)	55	16.6	30	9.0	2	0.6	6	1.8	239	72.0	2.0	1.61

Table 5.4.3: Mean scores and standard deviations of the two groups on agricultural information needs of the rural dwellers in the zone (N=51/N=332)

Agricultural information needs	Heads of branch libraries		Library users	
	Mean	SD	Mean	STD
Inputs (fertilizer, seeds, pesticides, vaccines, feeds, housing, vitamins and minerals)	4.6	0.84	4.4	1.14
Farm implements (plough, harrow, cultivators)	4.5	0.86	3.7	1.60
Tractors	4.2	1.27	3.5	1.61
Machinery (thrasher, winnower, harvester)	4.2	1.14	3.5	1.59
Farming techniques	4.2	1.21	3.5	1.67
Agricultural loans and credits	4.1	1.29	3.8	1.63
Marketing	3.9	1.51	3.1	1.85
Other agricultural information needs (preservation techniques and agricultural shows)	1.5	1.30	2.0	1.61

Agricultural information needs were wide ranging, for example, agricultural inputs (such as fertilizer, seeds, pesticides, vaccines, feeds, housing and vitamins and minerals) topped the agricultural information needs of the rural dwellers as reflected in the mean scores in Table 5.4.3 above. The responses in Table 5.4.1 shows that overall 96.1% of the heads of the branch libraries strongly agreed (39; 76.5%) and agreed (10; 19.6%) that rural dwellers in the area under study needed information on agricultural inputs. These responses are seen at highest mean score of 4.6 and a standard deviation of 0.84. The responsesfrom Table 5.4.1 clearly show that none of these participants disagreed on the listed opinion, but two (3.9%) participants were undecided. Similarly, from the expressed opinions of the heads of branch libraries, it showcases that rural dwellers were in dare need of information on farm implements (like ploughs, harrows and cultivators) in order to boost their agricultural production. The responses in Table 5.4.1 also show that overall 96.1% of this group of participants strongly agreed (31; 60.8%) and agreed (18; 35.3%) that rural dwellers needed

such information. These are also reflected in another high mean score of 4.5 and a standard deviation of 0.86 in Table 5.4.3. Based on the responses from Table 5.4.1, it can be observed that none of these participants disagreed with the listed opinion, except two (3.9%) participants who remained undecided. The heads of branch libraries added that information on machineries (such as thrashers, winnowers and harvesters) were equally important to rural dwellers. The responses inTable 5.4.1 confirm that 86.3% of this group of participants in total strongly agreed (24; 47.1%) and agreed (20; 39.2%) that rural dwellers were in need of such information. This opinion is reiterated from a mean score of 4.2 and a standard deviation of 1.14 in Table 5.4.3. Based on the expressed opinion from Table 5.4.1, it reveals that only 5.9% of the participants strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) that such information was vital to rural dwellers, while four (7.8%) participants were undecided on the listed item.

Furthermore, overall 84.4% of the heads of branch libraries strongly agreed (30; 58.8%) and agreed (13; 25.6%) that rural dwellers needed information on tractors. This is also reflected in the mean score of 4.2 and a standard deviation of 1.27 in Table 5.4.3. Only four (7.8%) participants disagreed on the listed item, while four (7.8%) participants remained undecided. Farming techniques was needed based on the opinion of the heads of branch libraries. This opinion is rated at a mean score of 4.2 and a standard deviation of 1.21 in Table 5.4.3. The responses in Table 5.4.1 clearly show that 82.4% in total of this group of participants strongly agreed (28; 54.9%) and agreed (14; 27.5%) that such information was needed by rural dwellers. Only 9.8% of this group strongly disagreed (3; 5.9%) and disagreed (2; 3.9%) on the listed item, while four (7.8%) participants remained undecided. It is noteworthy that information on agricultural loans and credits had important role to play in boosting the farming activities of rural dwellers. This opinion was expressed by the heads of branch libraries in Table 5.4.1 where overall 84.3% of these participants strongly agreed (27; 52.9%) and agreed (16; 31.4%) that rural dwellers needed such information. This is also reflected in a mean score of 4.1 and a standard deviation of 1.29 in Table 5.4.3. Only three (5.9%) participants from this group disagreed on this opinion, while five (9.8%) participants remained undecided on the listed item. Information on marketing was seen as another resource that can boost farming activities in rural areas. This fact was attested to by the heads of branch libraries who believed that rural dwellers needed such information to market their agricultural products. The responses from Table 5.4.1 show that 78.5% in total of the group strongly agreed (26; 51.0%) and agreed (14; 27.5%) that rural dwellers needed such

information. This is indicated with a mean score of 3.9 and standard deviation of 1.51 in Table 5.4.3. Only two (3.9%) participants from this group disagreed that such information was needed by the rural dwellers, while nine (17.6%) participants remained undecided.

For the library users, agricultural inputs also topped their agricultural information needs as rural dwellers. This opinion is represented in a high mean score of 4.4 and a standard deviation of 0.84 in Table 5.4.3. The responses in Table 5.4.2 show that 88.3% of participants from this group as rural dwellers strongly agreed (221; 66.6%) and agreed (72; 21.7%) that they needed information on agricultural inputs (such as fertilizer, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals). Only 4.2% in total of the participants strongly disagreed (7; 2.1%) and disagreed (7; 2.1%) that they needed such information, while 25 (7.5%) participants remained undecided. The second high ranking agricultural information need from the perspective of library users was information on agricultural loans and credits. Table 5.4.2 shows that 73.5% in total of the library users strongly agreed (172; 51.8%) and agreed (72; 21.7%) that they needed such information. These responses are seen at a mean score of 3.8 and a standard deviation of 1.63 in Table 5.4.3. Only 3.0% of the participants from this group strongly disagreed (6; 1.8%) and disagreed (4; 1.2%) on the listed item, while 78 (23.5%) participants remained undecided.

In a similar vein, the library users were of the opinion that information on farm implements (like ploughs, harrows and cultivators) was needed for agricultural activities. The responses from Table 5.4.2 reveals that 72.9% in total of the group strongly agreed (146; 44.0%) and agreed (96; 28.9%) that as rural dwellers they required such information. This opinion is reflected in a mean score of 3.7 and a standard deviation of 1.60 in Table 5.4.3. The responses in Table 5.4.2 clearly reveal that only 3.6% of the participants strongly disagreed (1.5%) and disagreed (2.1%) that they needed such information, while 78 (23.5%) participants remained undecided. Information on agricultural marketing was also needed by rural dwellers as indicated by 56.4% of the participants who strongly agreed (131; 39.5%) and agreed (56; 16.9%) with the listed opinion. This is reflected in a mean score of 3.1 and a standard deviation of 1.85 in Table 5.4.3. Only 2.7% in total of the participants strongly disagreed (1; 0.3%) and disagreed (8; 2.4%) that rural dwellers needed information on agricultural marketing, while 136 (41.0%) remained undecided. The responses from Table 5.4.2 shows that the least agricultural information needs rated almost on the same frequencies and percentages by the library users were tractors (139; 41.9% and 72; 21.7%), machineries (128; 38.6% and 96; 28.9%) and farming techniques (142; 42.8% and 75; 22.6%). The data

shows that more than 60% of this group of participants strongly agreed and agreed that rural dwellers needed information on the listed items. These are reflected in the same mean scores of 3.5 for each of three listed items with standard deviations ranged from 1.59-1.67 as shown in Table 5.4.3. Only 13.2% of the participants strongly disagreed (25; 7.5%) and disagreed (19; 5.7%) that rural dwellers needed information on tractors, while 77 (23.2%) participants remained undecided. It also indicates that only 9.3% of the participants strongly disagreed (15; 4.5%) and disagreed (16; 4.8%) that information on machineries was needed, while 77 (23.2%) were undecided. Based on the responses, it also shows that only 9.6% in total of this group of participants strongly disagreed (5; 1.5%) and disagreed (27; 8.1%) that they needed information on farming techniques, while 83 (25%) participants remained undecided. These agricultural information needs tended to be consistent with the occupational orientation of the rural people which is primarily farming.

The data shows that rural dwellers need information on various aspects of agriculture which could be used to boost agricultural outputs for food security and sustainable development not only at the rural level, but also at the national level. This indicates that rural dwellers understand the importance of information as a critical resource that can be used to boost agricultural production. Therefore, public libraries are expected to provide information in various media and on different aspects of agriculture that can meet the needs of rural dwellers.

Although the data shows that there are no significant differences in the mean scores generally between the two groups of participants, it broadly indicates that the users' mean scores in the ranking are lower than those of the heads of the branch libraries. Similarly, the mean scores and standard deviation in Table 5.4.3 show that there are consensus opinions between the two groups of the participants. All the two groups agreed that these were the agricultural information needs of the rural dwellers.

Both the heads of branch libraries and library users were then asked to indicate the information needs of rural dwellers on health related issues. Tables 5.4.4, 5.4.5 and 5.4.6 below show the responses along with the mean scores and standard deviations of the two groups on the health information needs of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were presented in Table 5.4.6 to enable a comparative analysis and visualize the differences on health information needsof the rural dwellers in the perspectives of the two groups.

Table 5.4.4: Responses of the heads of the branch libraries on health information needs of rural dwellers in the area under study (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Health information needs	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Infectious disease (HIV/AIDS, TB, hepatitis, malaria, influenza, diarrhoea)	35	68.6	10	19.6	2	3.9	1	2.0	3	5.9	4.4	1.08
Maternal and child health care	28	54.9	19	37.2	-	-	1	2.0	3	5.9	4.3	1.03
Routine immunization	30	58.8	17	33.3	1	2.0	-	-	3	5.9	4.4	1.00
Nutrition	25	49.0	14	27.5	2	3.9	6	11.8	4	7.8	4.0	1.32
Family planning	19	37.3	18	35.3	4	7.8	4	7.8	6	11.8	3.8	1.35
Disease/epidemic outbreaks	18	35.3	24	47.1	2	3.9	3	5.9	4	7.8	4.0	1.17
Environmental sanitation	24	47.1	18	35.3	-	-	2	3.9	7	13.7	4.0	1.38
Other health information needs(health insurance scheme)	2	3.9	1	2.0	-	-	1	2.0	47	92.2	1.2	0.89

Table 5.4.5: Responses of the library users on health information needs of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Health information needs	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Infectious disease (HIV/AIDS, TB, hepatitis, malaria, influenza, diarrhoea)	155	46.7	96	28.9	2	0.6	10	3.0	69	20.8	3.8	1.56
Maternal and child health care	163	49.1	94	28.3	9	2.7	10	3.0	56	16.9	3.9	1.47
Routine immunization	163	49.1	79	23.8	2	0.6	12	3.6	76	22.9	3.7	1.62
Nutrition	159	47.9	67	20.2	11	3.3	27	8.1	68	20.5	3.7	1.61
Family planning	140	42.2	65	19.6	15	4.5	24	7.2	88	26.5	3.4	1.68
Disease/epidemic outbreaks	141	42.5	84	25.3	7	2.1	20	6.0	80	24.1	3.6	1.63

Environmental sanitation	132	39.8	74	22.3	2	0.6	9	2.7	115	34.6	3.3	1.77
Other health information needs (information on diabetes)	61	18.4	35	10.5	6	1.8	2	0.6	228	68.7	2.1	1.67

Table 5.4.6: Mean scores and standard deviations of the two groups on health information needs of the rural dwellers in the zone (N=51/N=332)

Health information needs	Heads of branch libraries		Library users	
	Mean	STD	Mean	STD
Infectious diseases (HIV/AIDS, TB, hepatitis, malaria, influenza, diarrhea)	4.4	1.08	3.8	1.56
Maternal and child health care	4.3	1.03	3.9	1.47
Routine immunization	4.4	1.00	3.7	1.62
Nutrition	4.0	1.32	3.7	1.61
Family planning	3.8	1.35	3.4	1.68
Disease/epidemic outbreaks	4.0	1.17	3.6	1.63
Environmental sanitation	4.0	1.38	3.3	1.77
Other health information needs(diabetes and health insurance schemes)	1.2	0.89	2.1	1.67

As regards health information needs shown in Table 5.4.6 above, information relating to infectious diseases (like HIV/AIDS, TB, hepatitis, malaria, influenza and diarrhoea) and routine immunization were the most outstanding information needs as identified by the heads of branch libraries at a mean score of 4.4 and a standard deviation of 1.08. Similarly, responses in Table 5.4.4 show that overall 88.2% of this group of participants strongly agreed (35; 68.6%) and agreed (10; 19.6%) respectively that rural dwellers needed such information for a healthy society. The table shows that only 5.9% in total of this group strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) that rural dwellers needed information on the listed item, while three (5.9%) participants remained undecided.

With regards to information on routine immunization, the data in Table 5.4.4 also shows that 92.1% in total of the heads of the branch libraries strongly agreed (30; 58.8%) and agreed (17; 33.3%) that rural dwellers needed such information. These responses are also seen at a mean score of 4.4 and a standard deviation of 1.00 in Table 5.4.6. Onlyonly one (2.0%) participant strongly disagreed with the listed item and three (5.9%) participants remained undecided. From the perception of the heads of branch libraries information maternal and

child health care is essential to rural dwellers. The responses from Table 5.4.4 shows that 92.1% of the heads of branch libraries strongly agreed (28; 54.9%) and agreed (19; 37.2%) that rural dwellers needed information on maternal and child health care. This is reflected in a mean sore of 3.9 and standard deviation of 1.47 in table 5.4.6. Only one (2.0%) participant from this group disagreed that rural dwellers needed such information, while three (5.9%) participants were undecided.

Informationon disease/epidemic outbreaks, environmental sanitation and nutrition were equally ranked by the heads of branch libraries with an average mean scores of 4.0 on each and standard deviations ranged from 1.17-1.38. The responses from Table 5.4.4 show that overall 82.4% of the participants strongly agreed (18; 35.3%) and agreed (24; 47.1%) that rural dwellers needed information on disease/epidemic outbreaks. Only 9.8% in total of the participants strongly disagreed (2; 3.9%) and disagreed (3; 5.9%) that rural dwellers needed information on the listed item, while four (7.8%) participants remained undecided. Table 5.4.4 shows that 82.4% in total of this group of participants strongly agreed (24; 47.1%) and agreed (18; 35.3%) that rural dwellers needed information on environment sanitation. Only two (3.9%) participants disagreed that rural dwellers needed information on the listed item. It also indicates that seven (13.7%) participants were undecided. Likewise, the table reveals that 76.5% of this group strongly agreed (25; 49.0%) and agreed (14; 27.5%) that rural dwellers in the area under study needed information on nutrition. Based on the responses from the table, only 15.7% of the participants strongly disagreed (2; 3.9%) and disagreed (6; 11.8%) that rural dwellers needed information on the listed item, while four (7.8%) of the participants remained undecided.

Information on family planning ranked the least by the heads of branch libraries with a mean score of 3.8 and a standard deviation of 1.35. The responses from Table 5.4.4 show that 72.6% in total of this group of participants strongly agreed (19; 37.3%) and agreed (18; 35.3%) respectively that rural dwellers needed information on family planning. Only 15.6% of the participants strongly disagreed (4; 7.8%) and disagreed (4; 7.8%) that rural dwellers needed information on the listed item, while six (11.8%) participants remained undecided.

For the library users as rural dwellers, information on maternal and child health care topped their health information needs at a mean score of 3.9 and a standard deviation of 1.47 in Table 5.4.6. The responses from Table 5.4.5 show that 77.4% in total of the participants from this group strongly agreed (163; 49.1%) and agreed (94; 28.3%) that rural dwellers in the area

under study needed information on maternal and child health care. Only 5.7% of the library users strongly disagreed (9; 2.7%) and disagreed (10; 3.0%) that rural dwellers needed information on the listed item, while 56 (16.9%) participants remained undecided. Similarly, from the perception of the library users, information on infectious diseases was next in the hierarchy. This is reflected in a mean score of 3.8 and standard deviation of 1.56 in Table 5.4.6. The responses from Table 5.4.5 show that overall 75.6% of this group of participants strongly agreed (155; 46.7%) and agreed (96; 28.9%) that they needed information on infectious diseases. Only 3.6% in total of the participants strongly disagreed (2; 0.6%) and disagreed (10; 3.0%) that such information was needed, while 69 (20.8%) participants remained undecided.

Furthermore, the responses from Table 5.4.5 show that 72.9% of the library users strongly agreed (163; 49.1%) and agreed (79; 23.8%) that they needed information on routine immunization. This is reflected in a mean score of 3.7 and a standard deviation of 1.62 in Table 5.4.6. Only 4.2% of the participants from this group strongly disagreed (2; 0.6%) and disagreed (12; 3.6%) that rural dwellers needed information on the listed item, while 76 (22.9%) participants remained undecided. Similarly, the expressed opinions of the library users reveal that information nutrition was vital to them; as such it was needed for the improvement of their health status. The responses from Table 5.4.5 show that 68.1% in total of the participants strongly agreed (159; 47.9%) and agreed (67; 20.2%) that rural dwellers needed such information. These responses can also be seen at a mean score of 3.7 and a standard deviation 1.61 in Table 5.4.6. Only 11.4% of the participants strongly disagreed (11; 3.3%) and disagreed (27; 8.1%) that rural dwellers needed information on nutrition, while 68 (20.5%) participants remained undecided.

In a similarly vein, the perception of library users show that information on disease/epidemic outbreaks was needed. The responses from Table 5.4.5 confirm that 67.8% in total of this group of participants strongly agreed (141; 42.5%) and agreed (84; 25.3%) that they needed information on disease/epidemic outbreaks. This is reflected in a mean score of 3.6 and a standard deviation of 1.63 in Table 5.4.6. Only 8.1% of this group strongly disagreed (7; 2.1%) and disagreed (20; 6.0%) that rural dwellers needed such information, while 80 (24.1%) participants were undecided. Likewise, the perception of the library users shows that information on family planning was the next in the hierarchy. The responses from Table 5.4.5 reveals that overall 61.8% of these participants as rural dwellers strongly agreed (140; 42.2%)

and agreed (65; 19.6%) that they needed information on family planning. This opinion is seen at a mean score of 3.4 and a standard deviation of 1.68 in Table 5.4.6. Only11.7% of this group of participants strongly disagreed (15; 4.5%) and disagreed (24; 7.2%) that they needed such information, while 88 (26.5%) participants remained undecided.

The least in the ranking in the perception of the rural dwellers was information on environmental sanitation. The responses from Table 5.4.5 reveals that 62.1% in total (132; 39.8% and 74; 22.3%) of this group of participants strongly agreed and agreed respectively that they needed information on environmental sanitation. This is reflected in a mean score of 3.3 and standard deviation of 1.77 in Table 5.4.6. Only 3.3% of these participants strongly disagreed (2; 0.6%) and disagreed (9; 2.7%) that they needed information on the listed item, while 115 (34.6%) participants were undecided. From the mean scores and standard deviations in Table 5.4.6, it indicates that there is consensus agreement between the opinions of the two groups regarding the health information needs of rural dwellers. Based on the opinions of the two groups, rural dwellers in the area under study generally needed information on all issues related to health.This indicates that there were high expectations on public libraries in providing information on health related issues.

Generally, the data indicates that rural dwellers need information on a range of health related issues. This indicates that rural dwellers understand the important roles information plays in ensuring a healthy society. This also reveals that rural dwellers come to a conclusion that there can never be sustainable development without improved health services in rural communities and health issues can be a matter of life and death. From the data, it shows that there are no significant differences in the mean scores between the heads of the branch libraries and the library users. Generally, the mean scores and standard deviations indicate that the opinions of library users in the ranking are lower than those of the heads of the branch libraries. This reveals that there were high expectations on public libraries in providing information on health related issues.

Heads of branch libraries and library users were both asked to indicate the information needs of rural dwellers on government policies. Tables 5.4.7, 5.4.8 and 5.4.9 below show the responses along with the mean scores and standard deviations of the two groups on government policies as information needs of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were presented in Table 5.4.9 to

enable a comparative analysis and to visualize the differences on government policies as information need in the perspectives of the two groups.

Table 5.4.7: Responses of the heads of the branch libraries on government policies as information need rural dwellers in the area under study (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Government policies as information need	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Governance	30	58.8	16	31.4	-	-	2	3.9	3	5.9	4.3	1.56
Elections and voters' registration	18	35.3	29	56.9	-	-	1	2.0	3	5.9	4.1	1.47
Population census	22	43.1	21	41.2	1	2.0	2	3.9	5	9.8	4.0	1.62
Afforestation	17	33.3	22	43.1	2	3.9	4	7.8	6	11.8	3.8	1.61
Deforestation	14	27.5	23	45.1	3	5.9	7	13.7	4	7.8	3.7	1.68
Skills acquisition	18	35.3	20	39.2	-	-	4	7.8	9	17.6	3.7	1.63
Government programmes (rural development)	21	41.2	21	41.2	1	2.0	1	2.0	7	13.7	3.9	1.77
Other information needs(pension policies, housing schemes)	1	2.0	2	3.9	-	-	-	-	48	94.1	1.2	1.67

Table 5.4.8: Responses of the library users on government policies as information needs of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Information on government policies as information need	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Governance	128	38.6	97	29.2	9	2.7	12	3.6	86	25.9	3.5	1.63
Elections and voters' registration	151	45.5	111	33.4	-	-	11	3.3	59	17.8	3.9	1.47
Population census	122	36.7	97	29.2	13	3.9	14	4.2	86	25.9	3.5	1.62
Afforestation	107	32.2	95	28.6	19	5.7	26	7.8	85	25.6	3.3	1.60
Deforestation	148	44.6	75	22.6	20	6.0	25	7.5	64	19.3	3.7	1.56
Skills acquisition	153	46.1	83	25.0	14	4.2	8	2.4	74	22.3	3.7	1.59
Government programmes (rural development)	110	33.1	69	20.8	2	0.6	12	3.6	139	41.9	3.0	1.80

Other information needs(poverty eradication programmes)	73	22.0	54	16.3	3	0.9	6	1.8	196	59.0	2.4	1.75

Table 5.4.9: Mean scores and standard deviations of the two groups on government policies as an information need of the rural dwellers in the area under study (N=51/N=332)

Government policies as information need	Heads of branch libraries		Library users	
	Mean	STD	Mean	STD
Governance	4.3	1.56	3.5	1.63
Elections and voters' registration	4.1	1.47	3.9	1.47
Population census	4.0	1.62	3.5	1.62
Afforestation	3.8	1.61	3.3	1.60
Deforestation	3.7	1.68	3.7	1.56
Skills acquisition	3.7	1.63	3.7	1.59
Government programmes (rural development)	3.9	1.77	3.0	1.80
Other information needs(pension policies, housing schemes and poverty eradication programmes)	1.2	1.67	2.4	1.75

According to the heads of branch libraries, information on governance (the processes of governing in a social system) topped the information needs of the rural dwellers about government policies. This is indicated with the highest mean score of 4.3 and a standard deviation of 1.56 in Table 5.4.9. The data in Table 5.4.7 above shows that 90.2% in total of the heads of branch libraries strongly agreed (30; 58.8%) and agreed (16; 31.4%) that rural dwellers in the area under study needed information on governance. Only two (3.9%) participants from this group disagreed that rural dwellers needed such information, while three (5.9%) participants remained undecided. This was followed by information need on elections and voters' registration in the perception of the heads of branch libraries. This is reflected in a mean score of 4.1 and a standard deviation of 1.47 in Table 5.4.9. The responses from Table 5.4.7 show that 92.2% in total of this group strongly agreed (18; 35.3%) and agreed (29; 56.9%) that rural dwellers needed such information. Only one (2.0%) participant from the group disagreed that such information was needed by rural dwellers, while only three (5.9%) participants were undecided. Likewise, the responses from Table 5.4.7 indicate that overall 84.3% of the heads of branch libraries strongly agreed (22; 43.1%) and agreed (21; 41.2%) that rural dwellers needed information on population census as government policy. This is reflected in a mean score of 4.0 and a standard deviation of 1.62

in Table 5.4.9. Only 5.9% of the participants strongly disagreed (1; 2.0%) and disagreed (2; 3.9%) that rural dwellers needed such information, while five (9.8%) participants were undecided. Likewise, the responses of the heads of branch libraries indicated that rural dwellers needed information population census. This was indicated by 22 (43.1%) and 21 (41.2%) participants who strongly agreed and agreed respectively that that such information was needed by rural dwellers. This is also reflected in a mean score of 4.0 and a standard deviation of 1.62 in Table 5.4.9. Only one (2.0%) and two (3.9%) participants strongly disagreed and disagreed with such opinion, while five (9.8%) participants remained undecided.

In a similar vein, the perception of the heads of branch libraries indicates that rural dwellers needed information on government programmes for rural development. The responses from Table 5.4.7 show that 82.4% in total of the heads of branch libraries strongly agreed (21; 41.2%) and agreed (21; 41.2%) that such information was needed by rural dwellers. This is reflected in a mean score of 3.9 and a standard deviation of 1.77 in Table 5.4.9.Only four percent of the participants from this group strongly disagreed (1; 2.0%) and disagreed (1; 2.0%) that rural dwellers needed such information, while seven (13.7%) participants remained undecided. Similarly, the responses from Table 5.4.7 reveal that more than 76.4% in total of the heads of branch libraries strongly agreed (17; 33.3%) and agreed (22; 43.1%) that rural dwellers needed information on afforestation as a government policy. These responses are also reflected in a mean score of 3.8 and standard deviation of 1.61 in Table 5.4.9. Only 11.7% of these participants strongly disagreed (2; 3.9%) and disagreed (4; 7.8%) that such information was needed by rural dwellers, while six (11.8%) participants remained undecided.

Furthermore, from the expressed opinions of the heads of branch libraries, rural dwellers needed information on skills acquisition to boost their economic status. The responses from Table 5.4.7 show that 74.5% in total of this group of participants strongly agreed (18; 35.3%) and agreed (20; 39.2%) that such information was highly needed by rural dwellers. This opinion is reflected in a mean score of 3.7 and a standard deviation of 1.63 in Table 5.4.9. Only four (7.8%) participants disagreed on the listed opinion, while nine (17.6%) participants were undecided. Similarly, the responses from Table 5.4.7 indicate that 72.6% of the heads of branch libraries strongly agreed (14; 27.5%) and agreed (23; 45.1%) that rural dwellers needed information on deforestation as a government policy. These responses are also

reflected in a mean score of 3.7 and a standard deviation of 1.68 in Table 5.4.9. Only 19.6% of the participants strongly disagreed (3; 5.9%) and disagreed (7; 13.7%) that rural dwellers needed such information, while four (7.8%) participants remained undecided.

For the library users, they prioritized on information on elections and voters' registration as government policy. The responses from Table 5.4.8 indicate that more than 78.9% in total of this group strongly agreed (151; 45.5% and agreed (111; 33.4%) that they needed information on the listed item. This is reflected in a mean score of 3.9. Only 11 (3.3%) participants from this group disagreed that rural dwellers needed such information, while 59 (17.8%) participants remained undecided. Likewise, information on deforestation was considered by the library users important for sustainable rural development. The responses from Table 5.4.8 indicate that 67.2% in total of this group of participants strongly agreed (148; 44.6%) and agreed (75; 22.6%) that they needed such information as a government policy. This is reflected in a mean score of 3.7 and a standard deviation of 1.56 in Table 5.4.9. Only 13.5% of this group strongly disagreed (20; 6.0%) and disagreed (25; 7.5%) that rural dwellers needed information on the listed item, while 64 (19.3%) participants were undecided. The perception of the library users also indicates that rural dwellers needed information on skills acquisition as a government policy. The responses from Table 5.4.8 show that 71.1% in total of this group as rural dwellers strongly agreed (153; 46.1) and agreed (83; 25.0%) that they needed such information. This is reflected in a mean score of 3.7 and a standard deviation of 1.59 in Table 5.4.9. Only 6.6% participants from this group strongly disagreed (14; 4.2%) and disagreed (8; 2.4%) that such information was needed by rural dwellers. It also indicates that 74 (22.3%) participants remained undecided.

The perception of about 70% of the library users indicated that rural dwellers needed information on governance, population census and afforestation along with rural development which come a distance down in the hierarchy. The responses from Table 5.4.8 show that 67.8% in total of the participants strongly agreed (128; 38.6%) and agreed (97; 29.2%) that they needed information on governance as a government policy. This is reflected in a mean score of 3.5 and a standard deviation of 1.63 in table 5.4.9. Only 6.3% of this group of participants strongly disagreed (9; 2.7%) and disagreed (12; 3.6%) that rural dwellers needed such information, while 86 (25.9%) participants were undecided on the item. Information on population census as a government policy was the next in the ranking. The responses from Table 5.4.8 show that overall 65.9% participants from this group strongly agreed (122;

36.7%) and agreed (97 29.2%) that such information was needed by rural dwellers. This is indicated in a mean score of 3.5 and standard deviation of 1.62 in table 5.4.9. Only 8.1% of the participants strongly disagreed (13; 3.9%) and disagreed (14; 4.2%) that they needed information on the listed item, while 86 (25.9%) participants were undecided. Likewise, the responses from Table 5.4.8 reveal that 60.8% in total of the library users strongly agreed (107; 32.2%) and agreed (95; 28.6%) that they needed information on afforestation as a government policy. This reflected in a mean score of 3.3 and a standard deviation of 1.60 in Table 5.4.9.Only 13.5% participants from this group strongly disagreed (19; 5.7%) and disagreed (26; 7.8%) that rural dwellers needed information on the listed item, while 85 (25.6%) participants were undecided.

The least information need on government policies according to the ranking, was information on government programmes for rural development. The responses from Table 5.4.8 show that overall 53.9% in total of the library users strongly agreed (110; 33.1%) and agreed (69; 20.8%) that they needed information on the listed item. This is also reflected in a mean score of 3.0 and a standard deviation of 1.80 in Table 5.4.9. Only 4.2% of the participants strongly disagreed (2; 0.6%) and disagreed (12; 3.6%) on the listed item, while 139 (41.9%) participants were undecided.

In essence, the opinion of the heads of the branch libraries who perceived government policiesas information need of the rural dwellers really tally with those of the library users in the areas of deforestation and skill acquisition as reflected in Table 5.4.9 above. Therefore, the mean scores and standard deviations in the table confirmed that there is consensus agreement between the opinions of the two groups regarding government policies as information needs of the rural dwellers. Generally, it indicates that the perceptions of the two groups agreed that rural dwellers needed information about government policies on all the items listed in the tables.

From the data it can be seen that rural dwellers need information on government policies which are pertinent to the attainment of sustainable rural development. This was as a result of their desire to know what their obligations are and what is due to them as citizens. With this knowledge they would be able to pursue their rights from authorities and contribute from their quota to the development of their communities. This indicates that public libraries are expected to cater for the information needs of rural dwellers regarding different government policies.

Participants were then asked to respond about the economic information needs of rural dwellers. Tables 5.4.10, 5.4.11 and 5.4.12 below show the responses along with the mean scores and standard deviations of the two groups on the economic information needs of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were presented in Table 5.4.12 to enable a comparative analysis and to visualize the differences on economic information needs in the perspectives of the two groups.

Table 5.4.10: Responses of the heads of the branch libraries on economic information needs in the area under study (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Economic information needs	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Micro-credit loans and finance	30	58.8	16	31.4	-	-	1	2.0	4	7.8	4.3	1.14
Business/entrepreneurial skills	26	51.0	18	35.3	1	2.0	2	3.9	4	7.8	4.2	1.18
Youth and women empowerment	32	62.7	17	33.3	-	-	-	-	2	3.9	4.5	0.86
Employment opportunities	29	56.9	14	27.5	3	5.9	2	3.9	3	5.9	4.3	1.13
Other economic information needs(occupations, job vacancies, vocational and training programmes)	6	11.8	1	2.0	-	-	-	-	44	86.3	1.5	1.35

Table 5.4.11: Responses of the library users on economic information needs of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Economic information need	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Micro-credit loans and finance	139	41.9	93	28.0	9	2.7	7	2.1	84	25.3	3.6	1.63
Business/entrepreneurial skills	138	41.6	107	32.2	6	1.8	12	3.6	69	20.8	3.7	1.54
Youths and women empowerment	121	36.4	108	32.5	8	2.4	11	3.3	84	25.3	3.5	1.60

Employment opportunities	106	31.9	78	23.5	13	3.9	21	6.3	114	34.3	3.1	1.72
Other economic information needs(job vacancies)	35	10.5	31	9.3	4	1.2	12	3.6	250	75.3	1.8	1.43

Table 5.4.12: Mean scores and standard deviations of the two groups on economic information needs of the rural dwellers in the zone (N=51/N=332)

Economic information needs	Heads of branch libraries		Library users	
	Mean	STD	Mean	STD
Micro-credit loans and finance	4.3	1.14	3.6	1.63
Business/entrepreneurial skills	4.2	1.18	3.7	1.54
Youth and women empowerment	4.5	0.86	3.5	1.60
Employment opportunities	4.3	1.13	3.1	1.72
Other economic information needs(occupations, job vacancies, vocational and training programmes)	1.5	1.35	1.8	1.43

As shown in Table 5.4.12 above, the heads of the branch libraries were of the view that the most needed economic information by rural dwellers was information on youth and women empowerment. This is reflected in a mean score of 4.5 and a standard deviation of 1.60 in the table. In view of this, responses from Table 5.4.10 show that 96% in total of the participants from this group strongly agreed (32; 62.7%) and agreed (17; 33.3%) that rural dwellers needed such information. None of the participants from this group disagreed on the listed item, but two (3.9%) participants were undecided. Apart from the information needed on youth and women empowerment, next on the hierarchy was information on micro-credit loans and finance. The responses from Table 5.4.10 reveal that 90.2% in total of the participants from this group strongly agreed (30; 58.8%) and agreed (16; 31.4%) that rural dwellers needed such information. These responses can also be seen at a mean score of 4.3 and standard deviation of 1.14 in Table 5.4.12. Only one (2.0%) participant from this group disagreed that such information was needed by rural dwellers, while four (7.8%) participants remained undecided.

Furthermore, from the perception of the heads of branch libraries, rural dwellers needed information on employment opportunities. This perception was expressed by overall 84.4% of the participants from this group who strongly agreed (29; 56.9%) and agreed (14; 27.5%) on the listed item. This response is also indicated at a mean score of 4.3. Only 9.8% of the

participants from this group who strongly disagreed (3; 5.9%) and disagreed (2; 3.9%) that rural dwellers needed such information. The table shows that only three (5.9%) participants were undecided. The least in the hierarchy according to the opinions of the heads of branch libraries was information about business/entrepreneurial skills. The responses from Table 5.4.10 indicate 86.3% in total of this group strongly agreed (26; 51.0%) and agreed (18; 35.3%) that such information would boost the economic activities of rural dwellers. This is reflected in a mean score of 4.2 and standard deviation of 1.18 in Table 5.4.12. Only 5.9% of the participants strongly disagreed (1; 2.0%) and disagreed (2; 3.9%) on the listed item, while four (7.8%) participants remained undecided.

For the library users as rural dwellers, information on business/entrepreneurial skills was what they prioritized first. The responses from Table 5.4.11 show that 73.8% in total of this group strongly agreed (138; 41.6%) and agreed (107; 32.2%) that they needed such information. These responses are also reflected in a mean score of 3.7 and standard deviation of 1.54in Table 5.4.12. Only 5.4% of the group strongly disagreed (6; 1.8%) and disagreed (12; 3.6%) that they needed such information, while 69 (20.8%) participants were undecided. Similarly, from the response of the library users, information need on micro-credit loans and finance was the second in their priority. This response is seen at a mean score of 3.6 and standard deviation of 1.63 in Table 5.4.12. Based on the response in Table 5.4.11, it reveals that overall 69.9% of the participants strongly agreed (139; 41.9%) and agreed (93; 28.0%) that they needed such information. The table indicates that only 4.8% in total of this group strongly disagreed (9; 2.7%) and disagreed (7; 2.1%) that they needed information on micro-credit loans and finance, while 84 (25.3%) participants remained undecided.

From the responses of the library users in Table 5.4.11, 68.9% of them as rural dwellers strongly agreed (121; 36.4%) and agreed (108; 32.5%) that they needed information on youth and women empowerment. This is reflected in a mean score of 3.5 in Table 5.4.12. Only 5.7% of the participants strongly disagreed (8; 2.4%) and disagreed (11; 3.3%) that they needed such information. The table also shows that 84 (25.3%) participants were undecided. The least in the hierarchy as expressed by the library users was information need on employment opportunities. The responses from Table 5.4.11 indicates that overall 55.4% of this group strongly agreed (106; 31.9%) and agreed (78; 23.5%) that they needed such information. These responses are also reflected in a mean score of 3.1and a standard deviation of 1.72 in Table 5.4.12. Only 10.2% of this group strongly disagreed (13; 3.9%)

and disagreed (21; 6.3%) that such information was needed, while 114 (34.3%) participants were undecided.

The mean scores and standard deviations in Table 5.4.12 indicated that there is a consensus agreement between the two groups regarding the economic information needs of the rural dwellers in the area under study. Similarly, it indicates that the participants in each of the two groups who agreed on the items listed are higher than those that disagreed. This impliedly shows that the opinions of the heads of the branch libraries on the prioritization of economic information needs by the rural dwellers were not the same as those of the library users. The mean scores show that generally there is significant difference in the prioritization of economic information needs by the library users. The data shows that library users attached economic importance to information for sustainable rural development. In other words, it indicates that information on economic activities is vital to the aspirations of rural dwellers in their quest for sustainable rural development.

Participants were then asked to indicate the educational information needs of rural dwellers. Tables 5.4.13, 5.4.14 and 5.4.15 below show the responses along with the mean scores and standard deviations of the two groups on the educational information needs of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were also presented in Table 5.4.15 to enable a comparative analysis and to visualize the differences on educational information needs in the perspectives of the two groups.

Table 5.4.13: Responses of the heads of the branch libraries on educational information needs of rural dwellers in the area under study (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Educational information need	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Tertiary education	31	60.8	15	29.4	1	2.0	1	2.0	3	5.9	4.4	1.06
Secondary education	29	56.9	17	33.3	2	3.9			3	5.9	4.4	1.02
Universal basic education (UBE)	32	62.7	14	27.5	1	2.0	1	2.0	3	5.9	4.4	1.06
Adult education	28	54.9	17	33.3	2	3.9	1	2.0	3	5.9	4.3	1.06
Girl-child education	25	49.0	20	39.2	1	2.0	-	-	5	9.8	4.2	1.18
Nomadic education	21	41.2	22	43.1	3	5.9	1	2.0	4	7.8	4.1	1.13
Other educational information needs(career guidance	3	5.9							48	94.1	1.2	0.95
			-	-	-	-	-	-				

and counselling)													

Table 5.4.14: Responses of the library users on educational information needs of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Educational information needs	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Universal basic education (UBE)	198	59.6	82	24.7	3	.9	7	2.1	42	12.7	4.2	1.34
Adult education	108	32.5	130	39.2	14	4.2	11	3.3	69	20.8	3.6	1.49
Girl-child education	125	37.7	115	34.6	13	3.9	11	3.3	68	20.5	3.7	1.51
Nomadic education	98	29.5	122	36.7	13	3.9	19	5.7	80	24.1	3.4	1.55
Other educational information needs(matriculation examinations and scholarships)	45	13.6	16	4.8	1	0.3	3	0.9	267	80.4	1.7	1.46

Table 5.4.15: Mean opinions and standard deviations of the two groups on educational information needs of rural dwellers (N=51/N=332)

Educational information needs	Heads of branch libraries		Library users	
	Mean	STD	Mean	STD
Tertiary education	4.4	1.06	0.0	0.0
Secondary education (senior)	4.4	1.02	0.0	0.0
Universal basic education (UBE)	4.4	1.06	4.2	1.34
Adult education	4.3	1.06	3.6	1.49
Girl-child education	4.2	1.18	3.7	1.51
Nomadic education	4.1	1.13	3.4	1.55
Other educational information needs(career guidance and counselling, matriculation examinations and scholarships)	1.2	0.95	1.7	1.46

The information needs relating to tertiary and secondary education were not solicited from the rural dwellers. This was deliberate, because universal basic education (primary and junior secondary), adult education and nomadic education are the main concerns at the grassroots levels (local government levels). At the State and Federal levels, the main concerns are secondary education (senior secondary education) and tertiary education normally found in urban and semi-urban areas (discussions on these are provided in Chapter Six).

However, from the expressed opinions of the heads of branch libraries, the rural dwellers needed as much information about tertiary and secondary education as about universal basic education (UBE), yet the library users as rural dwellers rated information about UBE as their greatest educational information needs. The responses of this group in Table 5.4.13 show that 90.2% in total of the heads of branch libraries strongly agreed (31; 60.8%) and agreed (15; 29.4%) that rural dwellers needed information on tertiary education. These responses are seen at a mean score of 4.4 and a standard deviation of 1.06 in Table 5.4.15. Only four percent of the group strongly disagreed (1; 2.0%) and disagreed (1; 2.0%) that rural dwellers needed such information, while three (5.9%) participants remained undecided. Likewise, the responses from Table 5.4.13 show that overall 90.2% of this group strongly agreed (29; 56.9%) and agreed (17; 33.3%) that rural dwellers needed information on secondary education. These responses are also reflected in a mean score of 4.4 and a standard deviation of 1.02 in Table 5.4.15. Only two (3.9%) participants strongly disagreed that such information was needed by rural dwellers, while three (5.9%) participants remained undecided.

Furthermore, the heads of branch libraries were of the opinion that rural dwellers equally needed information on universal basic education. The responses from Table 5.4.13 confirm that 90.2% in total of the group strongly agreed (32; 62.7%) and agreed (14; 27.5%) that such information was needed by rural dwellers. These responses are also seen at a mean score of 4.4 and a standard deviation of 1.06 in Table 5.4.15. Only four percent of the participants strongly disagreed (1; 2.0%) and disagreed (1; 2.0%) that rural dwellers needed information on the listed item, while three (5.9) participants were undecided. Based on the opinions expressed in Table 5.4.13, it clearly shows that overall 88.2% of the heads of branch libraries strongly agreed (28; 54.9%) and agreed (17; 33.3%) that rural dwellers needed information on adult education. These opinions are reflected in a mean score of 4.3 and a standard deviation of 1.06 in Table 5.4.15. Only 5.9% of the group strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) that such information was needed by rural dwellers, while three (5.9%) participants remained undecided.

The heads of branch libraries identified information on girl-child education as one of the most outstanding needs of rural dwellers. The responses from Table 5.4.13 reveal that 88.2% in total of this group of participants strongly agreed (25; 49.0%) and agreed (20; 39.2%) that such information was needed by rural dwellers. These responses are also seen at a mean score

of 3.7 and a standard deviation of 1.51 in Table 5.4.15. Only one (2.0%) participant from this group strongly disagreed that such information was needed by rural dwellers, while five (9.8%) participants remained undecided. The leastin the hierarchy as expressed by the heads of branch libraries was information nomadic education. The responses from Table 5.4.13 show that 84.3% in total of the participants strongly agreed (21; 41.2%) and agreed (22; 43.1%) that such information was among the educational information needed by the rural dwellers. These responses are also seen at a mean score of 4.3 and a standard deviation of 1.13 in Table 5.4.15. Only 7.9%in total of the participants strongly disagreed (3; 5.9%) and disagreed (1; 2.0%) that rural dwellers needed such information, while four (7.8%) participants were undecided.

For the library users, they considered information about universal basic education as their first priority. The responses from Table 5.4.14 confirm that 84.3% of the participants from this group strongly agreed (198; 59.6%) and agreed (82; 24.7%) that they needed such information. These responses are also reflected in a mean score of 4.2 and standard deviation of 1.34 in Table 5.4.15. Only three percent of the group strongly disagreed (3; 0.9%) and disagreed (7; 2.1%) that they needed such information, while 42 (12.7%) participants remained undecided. Likewise, Table 5.4.14 shows that information needs relating to girl-child education was the second priority of the library users. The table clearly shows that 72.3% in total of the participants strongly agreed (125; 37.7%) and agreed (115; 34.6%) that they needed such information. The responses are also reflected in in a mean score of 3.7 and a standard deviation of 1.51 in Table 5.4.15. Only 7.2% of these participants strongly disagreed (13; 3.9%) and disagreed (11; 3.3%) that they needed information on the listed item, while 68 (20.5%) participants were undecided.

From the expressed opinions of the library users, information about adult education was considered to be the third in priority. The responses from Table 5.4.14 showthat overall 71.7% of this group as rural dwellers strongly agreed (108; 32.5%) and agreed (130; 39.2%) that they needed such information. This is reflected in a mean score of 3.6 and a standard deviation of 1.49 in Table 5.4.15. Only 7.5% of this group strongly disagreed (14; 4.2%) and disagreed (11; 3.3%) that they needed such information, while 69 (20.8%) participants remained undecided. The least in the ranking wasinformation about nomadic education, where 66.2% in total of the participants strongly agreed (98; 29.5%) and agreed (122; 36.7%) that they needed such information as shownin Table 5.4.14. These opinions are reflected in a

mean score of 3.4 and a standard deviation of 1.55 in Table 5.4.15.Only 9.6%in total of the participants strongly disagreed (13; 3.9%) and disagreed (19; 5.7%) that they needed such information, while 80 (24.1%) participant remained undecided.

The mean scores and standard deviations in Table 5.4.18 indicate that there is consensus agreement between the two groups of participants on what constitutes educational information needs of rural dwellers in the area under study. In each of the two groups the participants that agreed with the listed opinions are higher than those that disagreed. Though both groups rated the education information needs at different levels of importance, they agreed that the above were the important areas of educational information needs. This was due to their awareness of the position of education in human and societal development. It also shows that the perceptions of the two groups on education information needs at all levels signified that they were made to understand that qualitative education cannot be ensured in rural communities without effective public library services. As such public libraries have a key role to play in facilitating educational development in the rural areas by providing effective and innovative services.

Participants were then asked to respond about the cultural and recreational information needs of rural dwellers. Tables 5.4.16, 5.4.17 and 5.4.18 below show the responses along with the mean scores and standard deviations of the two groups on the culture and recreational information needs of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were presented in Table 5.4.18 to enable a comparative analysis and to visualize the differences on culture and recreational information needs in the perspectives of the two groups.

Table 5.4.16: Responses of the heads of the branch libraries on cultural and recreationalinformation needs of rural dwellers in the area under study (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Culture and recreation information need	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Cultural festivals	18	35.3	24	47.1	2	3.9	4	7.8	3	5.9	4.0	1.12
Tourism	11	21.6	26	51.0	1	2.0	9	17.6	4	7.8	3.6	1.23
Documentaries	11	21.6	27	52.9	2	3.9	4	7.8	7	13.7	3.6	1.30
Entertainments	12	23.5	25	49.0	2	3.9	9	17.6	3	5.9	3.7	1.19

| Other information needs(leisure, social welfare and social services) | 2 | 3.9 | 1 | 2.0 | 1 | 2.0 | | | 47 | 92.2 | 1.3 | 0.91 |
| | | | | | | | - | - | | | | |

Table 5.4.17: Responses of the library users on cultural and recreational information needs of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Information on culture and recreation need	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Cultural festivals	149	44.9	106	31.9	10	3.0	10	3.0	57	17.2	3.8	1.46
Tourism	79	23.8	117	35.2	24	7.2	29	8.7	83	25.0	3.2	1.53
Documentaries	122	36.7	98	29.5	23	6.9	28	8.4	61	18.4	3.6	1.50
Entertainments	90	27.1	106	31.9	8	2.4	37	11.1	91	27.4	3.2	1.61
Other information needs (current affairs)	41	12.3	17	5.1	3	0.9	-	-	271	81.6	1.7	1.43

Table 5.4.18: Mean scores and standard deviations of the two groups on cultural and recreational information needs of the rural dwellers (N=51/N=332)

Culture and recreation information needs of rural dwellers	Heads of branch libraries		Library users	
	Mean	STD	Mean	STD
Cultural festivals	4.0	1.12	3.8	1.46
Tourism	3.6	1.23	3.2	1.53
Documentaries	3.6	1.30	3.6	1.50
Entertainment	3.7	1.19	3.2	1.61
Other information needs (leisure, social welfare and social services and current affairs)	1.3	0.91	1.7	1.43

Table 5.4.16 shows that 82.4% in total of the heads of branch libraries strongly agreed (18; 35.3%) and agreed (24; 47.1%) that rural dwellers needed information on cultural festival. This is also reflected in a mean score of 4.0 and a standard deviation of 1.12 in Table 5.4.18. Only 11.7% of this group strongly disagreed (2; 3.9%) and disagreed (4; 7.8%) that rural dwellers needed such information, while three (5.9%) participants remained undecided. Likewise, from the expressed opinions of the heads of branch libraries, information on entertainment was the second priority. The responses in Table 5.4.16 show that overall 72.5%

of this group strongly agreed (12; 23.5%) and agreed (25; 49.0%) that rural dwellers needed information on the listed item. These responses are also seen at a mean score of 3.7 and a standard deviation of 1.19 in Table 5.4.18. Only 21.5% of the participants strongly disagreed (2; 3.9%) and disagreed (9; 17.6%) that rural dwellers needed information on the listed item, while only three (5.9%) participants were undecided.

Furthermore, the responses in Table 5.4.16 also show that 72.5% in total of the heads of the branch libraries strongly agreed (12; 23.5%) and agreed (25; 49.0%) that rural dwellers in the area under study needed information on documentaries. These responses are reflected in a mean score of 3.6 and a standard deviation of 1.30 in Table 5.4.18. Based on the responses from Table 5.4.16, it indicates that only 21.5% of the participants strongly disagreed (2; 3.9%) and disagreed (9; 17.6%) on the listed item, while three (5.9%) participants remained undecided. Information need on tourism was the least in the hierarchy in priority based on the opinion of the heads of branch libraries. The responses from Table 5.4.16 show that 72.6% of the participants strongly agreed (11; 21.6%) and agreed (26; 51.0%) that rural dwellers needed such information. These responses are also seen at a mean score of 3.6 and a standard deviation of 1.23 in Table 5.4.18. Only 19.6% in total of the participants strongly disagreed (1; 2.0%) and disagreed (9; 17.6%) that such information was needed by rural dwellers, while four (7.8%) participants remained undecided.

For the library users, information on cultural festival was their first priority. The responses from Table 5.4.17 reveal that overall 76.8% of the participants strongly agreed (149; 44.9%) and agreed (106; 31.9%) that they needed such information. These responses are also reflected in a mean score of 3.8 and a standard deviation of 1.46 in Table 5.4.18. Based on the responses from Table 5.4.17, it clearly indicates that only six percent of the participants strongly disagreed (10; 3.0%) and disagreed (10; 3.0%) that such information was needed, while 57 (17.2%) participants were undecided. Similarly, from the expressed opinions of the library users, information on documentaries was second in the hierarch. The responses from Table 5.4.17 indicate that 66.2% of this group of participants strongly agreed (122; 36.7%) and agreed (98; 29.5%) that they also needed such information. This is also reflected in a mean score of 3.6 and a standard deviation of 1.50 in Table 5.4.18. Based on the responses from Table 5.4.17, it indicates that only 15.3% in total of the participants as rural dwellers strongly disagreed (23; 6.9%) and disagreed (28; 8.4%) that they needed the information on the listed item, while 61 (18.4%) participants were undecided.

Furthermore, the perception of the library users on information on culture and recreation indicates that more than 50% of the participants needed information on tourism and entertainment. Table 5.4.17 shows that 59% in total of this group of participants strongly agreed (79; 23.8%) and agreed (117; 35.2%) that they required information on tourism. This is also reflected in the mean scores of 3.2 and a standard deviation of 1.53 in Table 5.4.18. Based on the responses from Table 5.4.17, it reveals that only 15.9% of this group of participants strongly disagreed (24; 7.2%) and disagreed (29; 8.7%) that they needed such information, while 83 (25.0%) participants remained undecided. Information on entertainment was the least in this hierarchy. The responses from Table 5.4.17 show that overall 59% of the participants strongly agreed (90; 27.1%) and agreed (106; 31.9%) that they needed information on entertainment. This is also reflected in a mean score of 3.2 and a standard deviation of 1.61. Only 13.5% of the participants strongly disagreed (8; 2.4%) and disagreed (37; 11.1%) that they needed such information as rural dwellers, while 91 (27.4%) participants also remained undecided.

Table 5.4.18 above show that both groups were of the view that information on cultural festivals topped their culture and recreation information needs. But there was a difference in prioritization in other areas of culture and recreation information needs although the mean scores were more similar than for other information needs. According to the heads of branch libraries, information needs concerning entertainment came second while the library users ranked information on documentaries as the second most important need. For the heads of branch libraries, information needs on tourism and documentaries were ranked at the same level while the library users ranked tourism and entertainment at the same level.In a nut shell, the mean scores and standard deviations in Table 5.4.18 indicate that there was a consensus agreement between the opinions of the two groups on areas of culture and recreational information needs. It indicates that the number of participants who agreed with the listed items as culture and recreational information needs of rural dwellers in the area under study is higher than those who disagreed.

Impliedly, this also indicates that both groups agreed that the listed information needs on culture and recreation were important. The data reveal that rural dwellers needed information about culture and recreation from public libraries. This indicates their desire to maintain their cultural norms and values which are the major identities of any society. It also shows that public libraries are expected to collect information sources that conveyed and documented the

cultural heritage of the rural communities served. Likewise, it shows that public libraries should be at the forefront in the provision of other recreational activities that will keep rural communities socially engaged and developing.

Participants were also asked to respond about the information needs of rural dwellers on rural development. Tables 5.4.19, 5.4.20 and 5.4.21 below show the responses along with the mean scores and standard deviations of the two groups on information needs on rural development of the rural dwellers in the area under study. The mean scores and the standard deviations of the two groups were presented in Table 5.4.21 to enable a comparative analysis and to visualize the differences on rural development information needs in the perspectives of the two groups.

Table 5.4.19: Responses of the heads of the branch libraries on information needs on rural development of rural dwellers in the area under study (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Information need onrural development	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Portable water	35	68.6	9	17.6	4	7.8	-	-	3	5.9	4.4	1.06
Rural electricity	29	56.9	15	29.4	2	3.9	2	3.9	3	5.9	4.3	1.11
Food security	27	52.9	18	35.3	2	3.9	2	3.9	2	3.9	4.3	1.01
Mode of transport (bus, car, vans, lorries, motorcycle, bicycle,	24	47.1	23	45.1	3	5.9	-	-	1	2.0	4.4	0.77
Accessible road	19	37.3	24	47.1	4	7.8	1	2.0	3	5.9	4.1	1.04
Housing	17	33.3	18	35.3	5	9.8	5	9.8	6	11.8	3.7	1.35
Other information needs (legal issues and human rights)	-	-	-	-	1	2.0	-	-	50	98.0	1.0	0.28

Table 5.4.20: Responses of the library users on information needs on rural development of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Information need on rural development	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Portable water	174	52.4	62	18.7	8	2.4	20	6.0	68	20.5	3.8	1.61
Rural electricity	125	37.7	92	27.7	12	3.6	31	9.3	72	21.7	3.5	1.58

Food security	132	39.8	85	25.6	19	5.7	28	8.4	68	20.5	3.6	1.56
Mode of transport (bus, car, vans, lorries, motorcycle, bicycle, foot)	131	39.5	106	31.9	4	1.2	15	4.5	76	22.9	3.6	1.58
Accessible road	117	35.2	101	30.4	5	1.5	35	10.5	74	22.3	3.5	1.58
Housing	109	32.8	78	23.5	1	0.3	32	9.6	112	33.7	3.1	1.73
Other information needs (NGOs and developmental programmes)	30	9.0	39	11.7	-	-	13	3.9	250	75.3	1.8	1.41

Table 5.4.21: Mean scores and standard deviations of the two groups on rural development information needs of the rural dwellers (N=51/N=332)

Rural development information needs	Heads of branch libraries		Library users	
	Mean	STD	Mean	STD
Portable water	4.4	1.06	3.8	1.61
Rural electricity	4.3	1.11	3.5	1.58
Food security	4.3	1.01	3.6	1.56
Mode of transport (bus, car, vans, lorries, motorcycle, bicycle)	4.4	0.77	3.6	1.58
Accessible road	4.1	1.04	3.5	1.58
Housing	3.7	1.35	3.1	1.73
Other information needs (legal issues, human rights, NGOs and developmental programmes)	1.0	0.28	1.8	1.41

From the perspective of the heads of branch libraries, Table 5.4.19 shows that the most outstanding information need of rural dwellers for rural development was information on mode of transport. The responses from the table show 92.2% in total of the heads of branch libraries strongly agreed (24; 47.1%) and agreed (23; 45.1%) that information on mode of transport (such as bus, car, vans, lorries, motorcycle and bicycle) was needed by rural dwellers. This is reflected is a mean score of 4.4 and a standard deviation of 0.77 in Table 5.4.21. Only three (5.9%) participants strongly disagreed and disagreed that rural dwellers needed information on the listed item, while only one (2.0%) participants remained undecided. Information need on portable water was second in the ranking. The responses from Table 5.4.19 show that 86.2% in total of the heads of branch libraries strongly agreed (35; 68.6%) and agreed (9; 17.6%) that rural dwellers needed such information. These responses are seen at a mean score of 4.4 and a standard deviation of 1.06 in Table 5.4.21.

Only four (7.8%) participants strongly disagreed that such information was the need of rural dwellers, while three (5.9%) participants remained undecided.

The heads of branch libraries were of the opinion that rural dwellers in the area under study needed information about food security for sustainable rural development. The responses from Table 5.4.19 confirm that overall 88.2% of the participants strongly agreed (27; 52.9%) and agreed (18; 35.3%) that such information was required by rural dwellers. These responses are also reflected in a mean score of 4.3 and a standard deviation of 1.01 in Table 5.4.21. Based on the responses from Table 5.4.19, it can be seen that only 7.8% of the participants strongly disagreed (2; 3.9%) and disagreed (2; 3.9%) that such information was the aspiration of rural dwellers, while only two (3.9%) participants were undecided.

Furthermore, from the expressed opinions of the heads of branch libraries, information on rural electricity is essential and needed in rural communities. The responses from Table 5.4.19 show that 86.3% in total of the participants strongly agreed (29; 56.9%) and agreed (15; 29.4%) that rural dwellers in the area under study needed information on rural electricity. This is indicated with a mean score of 4.3 and a standard deviation of 1.11 in Table 5.4.21. The data from Table 5.4.19 also indicates that only 7.8% in total of the participants strongly disagreed (2; 3.9%) and disagreed (2; 3.9%) that such information was needed by the rural dwellers, while only 3 (5.9%) participants were undecided. The next item on the hierarchy was information need on accessible roads. The responses from Table 5.4.19 show that overall 84.4% of the heads of branch libraries strongly agreed (19; 37.3%) and agreed (24; 47.1%) that such information was needed by rural dwellers. These responses are also reflected in a mean score of 4.1 and a standard deviation of 1.04 in Table 5.4.21. Based on the responses from Table 5.4.19, it can be seen that only 9.8% of the participants strongly disagreed (4; 7.8%) and disagreed (1; 2.0%) that rural dwellers needed such information, while three (5.9%) participants remained undecided. The least in the hierarchy was information on housing as expressed by the heads of branch libraries. The responses from Table 5.4.19 indicate 68.6% in total of the participants strongly agreed (17; 33.3%) and agreed (18; 35.3%) that such information was needed by rural dwellers. These responses are also seen at a mean score of 3.7 and a standard deviation of 1.35 in Table 5.4.24. Based on the responses from Table 5.4.19, it is clear that 19.7% of the participants strongly disagreed (5; 9.8%) and disagreed (5; 9.8%) that rural dwellers needed information on the listed item, while six (11.8%) participants remained undecided.

For the library users, information on portable water was their first priority as rural dwellers. The responses from Table 5.4.20 show that more than 71.1% of the participants from this group strongly agreed (174; 52.4%) and agreed (62; 18.7%) that they needed such information. This is also reflected in a mean score of 3.8 and a standard deviation of 1.61 in Table 5.4.21.Only 8.4% of the participants strongly disagreed (8; 2.4%) and disagreed (20; 6.0%) that such information was needed by rural dwellers, while 68 (20.5%) participants remained undecided. Information need on mode of transport was second in the hierarchy. The responses from Table 5.4.20 show that overall 71.4% of the participants strongly agreed (131; 39.5%) and agreed (106; 31.9%) that such information was essential to the development of their rural communities. The responses are also seen at a mean score of 3.6 and a standard deviation of 1.58 in Table 5.4.21. Based on the responses from Table 5.4.20, it indicates that only 5.7% of the participants strongly disagreed (4; 1.2%) and disagreed (15; 4.5%) that they needed such information. The table also shows that 76 (22.9%) participants were undecided on the listed opinion.

Next in the hierarchy was information on food security. The responses from Table 5.4.20 show that 65.4%in total of the library users strongly agreed (132; 39.8%) and agreed (85; 25.6%) that they needed information food security. These responses are also indicated in a mean score of 3.6 and a standard deviation of 1.56 in Table 5.4.21. Based on the responses from Table 5.4.20, it can be observed that only 14.1% of the participants strongly disagreed (19; 5.7%) and disagreed (28; 8.4%) on the listed item, while 68 (20.5%) participants remained undecided. With regards to information on rural electricity, the opinion of the library users showed that such information was pertinent to sustainable rural development. The responses in Table 5.4.20 reveal that 65.4% in total of the participants strongly agreed (125; 37.7%) and agreed (92; 27.7%) that they needed such information. This is also reflected in a mean score of 3.5 and a standard deviation of 1.58 in Table 5.4.21. Based on the responses from Table 5.4.20, it can be seen that only 12.9% of the participants strongly disagreed (12; 3.6%) and disagreed (31; 9.3%) that they needed information on the listed item, while 72 (21.7%) participants remained undecided.

Accessible roads are essential in any rural community; they enable public libraries to reach out their users with services that can facilitate sustainable rural development. Based on this reason, the responses from Table 5.4.20 confirm that overall 65.6% of the library users strongly agreed (117; 35.2%) and agreed (101; 30.4%) that information on accessible roads

was needed. These responses are also reflected in a mean score of 3.5 and a standard deviation of 1.58 in Table 5.4.21. The data in Table 5.4.20 clearly shows that only 12% of the participants strongly disagreed (5; 1.5%) and disagreed (35; 10.5%) that such information was needed, while 74 (22.3%) participants were undecided. The least information need in the hierarchy was information on housing. The responses in Table 5.4.20 show that 56.3% of the participants as rural dwellers strongly agreed (109; 32.8%) and agreed (78; 23.5%) that they needed such information. This is seen at a mean score of 3.1 and a standard deviation of 1.73 in Table 5.4.21. Only 9.9% of the participants strongly disagreed (1; 0.3%) and disagreed (32; 9.6%) that they needed such information, while 112 (33.7%) participants remained undecided.

The indication in Table 5.4.21 above is that the two groups were of the view that rural dwellers need information on the listed areas of rural development. According to the heads of branch libraries, information needs about portable water and modes of transportation ranked as the first priority of rural dwellers among the areas of rural development mentioned. These were followed by information needs on electrification, food security and road network along with housing. The library users also ranked information needs on portable water as their first priority. Next were information needs on mode of transportation, food security, rural electrification and accessible roads with housing as the least important area of their information needs.

The findings indicate that both groups were of the view that information on rural development was needed by rural dwellers. Table 5.4.21 reveals that there were large discrepancies in the mean scores between the heads of the branch libraries and library users about information needs of rural dwellers on rural development. The mean scores show that the opinions of the library users about needed information on rural development were lower than those of the heads of the branch libraries. However, the mean scores and standard deviations show that there is common agreement among the two groups rural dwellers needed information on the listed areas of rural development. The data shows that the number of participants from the two groups that agreed with the listed opinions is higher than those who disagreed.

Generally, from the expressed opinions of the heads of branch libraries and library users, the rural dwellers were in need of information for sustainable rural development especially on

agriculture, education, economy, government policies, health related issues, culture and recreation, as well as rural development.

5.5 Skills and methods used by rural dwellers to identify, access and use information from the public libraries and other sources

The library users as rural dwellers were asked to respond about the skills they used to identify, access and use information from public libraries and other sources. They expressed their opinions on the skills or ways they used to identify, access and use the relevant information they require from public libraries (in line with the second objective and second research question of the current study). They also indicated other skills they used to access information from sources other than those found in the libraries. The most popular way used by the rural dwellers to identify, access and use information from public libraries was by visiting the libraries to use the various information sources available (for the information sources used see section 5.6.1). In addition, they also used other skills and methods to identify, access and use information both from formal and informal sources such as contacting friends, neighbours, relatives and other people during market days. Other skills were receiving information from town criers, radio and television, contacts through cell phones, visiting viewing centers and health centers/dispensaries, receiving information from extension workers, gatekeepers, village heads, religious leaders, oral traditional healers, as well as from schools/adult centers.

Table 5.5 below shows the responses of the library users on the skills or ways they used in identifying, accessing and using information. The data is presented in frequencies and percentages in Table 5.5 along with mean scores computed on the five point scale and standard deviation.

Table 5.5: Responses of the library users about the skills used by themselves in accessing and using information from public libraries and other sources (N=332)

SA= Strongly agreed; A= Agreed; D= Disagreed; SD= Strongly disagreed; UD=Undecided; STD= Standard deviation

Skills/ways used for accessing information from the libraries and other sources	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Visiting libraries/resource centers	182	54.8	98	29.5	13	3.9	11	3.3	28	8.4	4.2	1.20
Contacting friends	110	33.1	143	43.1	23	6.9	21	6.3	35	10.5	3.8	1.25
Contacting neighbours	97	29.2	148	44.6	26	7.8	38	11.4	23	6.9	3.8	1.19
Contacting relatives	108	32.5	131	39.5	36	10.8	31	9.3	26	7.8	3.8	1.21
Contacts with other people during market days	79	23.8	155	46.7	45	13.6	31	9.3	22	6.6	3.7	1.13
Town criers	135	40.7	130	39.2	29	8.7	18	5.4	20	6.0	4.0	1.12
Radio	176	53.0	109	32.8	15	4.5	15	4.5	17	5.1	4.2	1.08
Television	143	43.1	134	40.4	20	6.0	13	3.9	22	6.6	4.1	1.11
Contacts through cell phones	129	38.9	114	34.3	33	9.9	35	10.5	21	6.3	3.9	1.21
Viewing centers	82	24.7	121	36.4	52	15.7	51	15.4	26	7.8	3.5	1.23
Health centers/dispensaries	107	32.2	106	31.9	44	13.3	54	16.3	21	6.3	3.7	1.25
Extension workers	67	20.2	126	38.0	51	15.4	60	18.1	28	8.4	3.4	1.23
Gatekeepers	60	18.1	133	40.1	53	16.0	52	15.7	34	10.2	3.4	1.24
Village heads	86	25.9	161	48.5	14	4.2	42	12.7	29	8.7	3.7	1.23
Religious leaders	97	29.2	142	42.8	18	5.4	38	11.4	37	11.1	3.7	1.31
Oral traditional healers	86	25.9	119	35.8	25	7.5	34	10.2	68	20.5	3.4	1.48
Schools/adult centers	82	24.7	107	32.2	16	4.8	16	4.8	111	33.4	3.1	1.64
Other skills: social media, bill boards, social and political gatherings	56	16.9	48	14.5	20	6.0	14	4.2	194	58.4	2.3	1.64

Table 5.5 above shows 84.3% in total of the library users strongly agreed (182; 54.8%) and agreed (98; 29.5%) respectively that they accessed and used information by visiting public libraries. This is reflected in a mean score of 4.2 and standard deviation of 1.20. Only 7.2% of the participants strongly disagreed (13; 3.9%) and disagreed (11; 3.3%) that they used such skill to access and use information, while 28 (8.4%) participants remained undecided. Receiving information on radio by rural dwellers was second among the skills used. The responses from Table 5.5 show that more than 85.8% in total of the participants strongly

agreed (176; 53.0%) and agreed (109; 32.8%) that they also used such skill. This is reflected in a mean score of 4.2 and a standard deviation of 1.08. Only nine percent of the participants strongly disagreed (15; 4.5%) and disagreed (15; 4.5%) that they received information on radio, while 17 (5.1%) participants remained undecided. Next in the hierarch was receiving information on television as a skill used to identify, access and use information. The responses from the table show that overall 83.5% of the participant participants strongly agreed (143; 43.1%) and agreed (134; 40.4%) that they also received information on television. Only 9.9% of the participants strongly disagreed (20; 6.0%) and disagreed (13; 3.9%) that they used the skill, while 22 (6.6%) participants remained undecided.

The next skill used by the library users as rural dwellers in identifying, accessing and using information was receiving information from town criers. The responses from Table 5.5 show that 79.9% in total of the participants strongly agreed (135; 40.7%) and agreed (130; 39.2%) that they used such skill to identify, access and use information. This is reflected in a mean score of 4.0 and a standard deviation of 1.12. Based on the responses from the table, it indicates that only 14.1% strongly disagreed (29; 8.7%) and disagreed (18; 5.4%) that they used such skill, while 20 (6.0%) participants were undecided. Contact through cell phones was also used as a skill by the library users to identify, access and use information. Responses recorded in Table 5.5 revealthat overall 73.2% of the participants strongly agreed (129; 38.9%) and agreed (114; 34.3%) that they used their cell phones to access and use information. This is reflected in a mean score of 3.9 and a standard deviation of 1.21. The responses recorded in the table clearly show that only 20.4% of the participants strongly disagreed (33; 9.9%) and disagreed (35; 10.5%) that they used the skill in accessing and using information for sustainable rural development, while 21 (6.3%) participants were undecided on the listed option.

Among the skills used by the library users to identify, access and use information from non-formal sources with equal mean scores of 3.8 were contacting friends, contacting neighbours and contacting relatives. The responses in Table 5.5 show that 76.2% of the participants strongly agreed (110; 33.1%) and agreed (143; 43.1%) that they used to contact friends to identify, access and use information. Only 13.2% of the participants strongly disagreed (23; 6.9%) and disagreed (21; 6.3%) that they used such skill, while 35 (10.5%) participants remained undecided. Similarly, the responses from Table 5.5 indicate that overall 73.8% of the participants strongly agreed (97; 29.2%) and agreed (148; 44.6%) that they used to

contact their neighbours to access and use information. Only 19.2% in total of the participants strongly disagreed (26; 7.8%) and disagreed (38; 11.4%) on the listed skill, while 23 (6.9%) of the participants were undecided. Contacting relatives was another skill used by rural dwellers to identify, access and use information to satisfy their information needs. Responses in Table 5.5 show that 72% in total of the participants strongly agreed (108; 32.5%) and agreed (131; 39.5%) that they accessed and used information by using such skill. The table shows that only 20.1% of the participants strongly disagreed (36; 10.8%) and disagreed (31; 9.3%) that they used to contact relatives to access and use information, while 26 (7.8%) participants remained undecided.

Other skills with equal mean scores (3.7) used by rural dwellers to access and use information were contacting other people during market days, receiving information from village heads and religious leaders. The responses from Table 5.5 show that overall 72% of the library users as rural dwellers strongly agreed (97; 29.2%) and agreed (142; 42.8%) that they received information from religious leaders. Only 16.8% of the participants strongly disagreed (18; 5.4%) and disagreed (38; 11.4%) that they used such skill to access and use information, while 37 (11.1%) participants remained undecided. Likewise, the responses from the table indicate that 70.5% in total of the participants strongly agreed (79; 23.8%) and agreed (155; 46.7%) that they used to contact other people during market days to identify, access and use information. The table reveals that only 22.9% in total of the participants strongly disagreed (45; 13.6%) and disagreed (31; 9.3%) that they used such skill, while 22 (6.6%) of the participants remain undecided. Similarly, responses from Table 5.5 indicate that overall 74.4% of the participants strongly agreed (86; 25.9%) and agreed (161; 48.5%) that they received information from village heads as another skill. Only 16.9% of the participants strongly disagreed (14; 4.2%) and disagreed (42; 12.7%) that they used such skill to access and use information, while 29 (8.7%) participants were undecided.

Furthermore, the library users as rural dwellers also received information from health centers/dispensaries. The responses from Table 5.5 show that 64.1% in total of the participants strongly agreed (107; 32.2%) and agreed (106; 31.9%) that they used such skill to identify, access and use information. This reflected in a mean score of 3.7 in Table 5.5. Only 29.6% of the participants strongly disagreed (44; 13.3%) and disagreed (54; 16.3%) that they used such skill, while 21 (6.3%) participants remained undecided. Similarly, the library users also identify, access and use information by visiting viewing centers. The responses

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from Table 5.5 show that 71% in total of this group of participants strongly agreed (82; 24.7%) and agreed (121; 36.4%) that they used such centers. This is reflected in a mean score of 3.5 and a standard deviation of 1.23 in the table. The data revealed that only 30.8%participants strongly disagreed (52; 15.7%) and disagreed (51; 15.1%) that they visited viewing centers to identify, access and use information, while 26 (7.8%) remained undecided.

From the data, it indicates that overall 61.7% of the participants strongly agreed (86; 25.9%) and agreed (119; 35.8%) that they received information from oral traditional healers as another skill to access and use information. This is reflected in a mean score of 3.4 and a standard deviation of 1.48. Only 17.7%in total of the participants strongly disagreed (25; 7.5%) and disagreed (34; 10.2%) that they used such skill, while 68 (20.5%) participants remained undecided on the listed item. Next in this hierarchy was receiving information from extension workers and gatekeepers. The responses from Table 5.5 show that 58.2% in total of the participants strongly agreed (67; 20.2%) and agreed (126; 38.0%) that they used to receive information from extension workers. The table indicates that only 33.5% of the participants strongly disagreed (51; 15.4%) and disagreed (60; 18.1%) that they used such skill, while 28 (8.4%) participants were undecided. Receiving information from gatekeepers as another skill was indicated by 58.2% of the library users who strongly agreed (60; 18.1%) and agreed (133; 40.1%) that they used the skill to access and use information for sustainable rural development. This is reflected in a mean score of 3.4 and a standard deviation of 1.24 in the table. Only 31.7% of the participants strongly disagreed (53; 16.0%) and disagreed (52; 15.7%) that they used to receive information from gatekeepers, while 34 (10.2%) participants were undecided.

The least in the hierarchy among the skills used by rural dweller to access and use information was receiving information from schools/adult centres. The responses from Table 5.5 show that 56.9% in total of the participants strongly agreed (82; 24.7%) and agreed (107; 32.2%) that they used such skill to access and use information. This reflected in a mean score of 3.1 and a standard deviation of 1.64 in the table. The data indicates that only 9.6% of the participants strongly disagreed (16; 4.8%) and disagreed (16; 4.8%) that they used such skill, while 111 (33.4%) participants were undecided on the listed skill.

The responses indicate that library users used a variety of ways and skills to find information inclusive of people and various forms of public media. Eighteen categories of skills/ways of identifying, accessing and using information were identified showing that a range of skills

and ways were needed to meet information needs. Ten out of the 18 categories of skills / ways listed involved contact with people whilst four involved using physical facilities such as libraries indicating the importance of face to face communication. The skills/ways listed in Table 5.5 which shows that the most frequent skills or ways used by the library users to identify, access and use information were by visiting the libraries as well as by receiving information on radio.

5.6 Information sources and services from public libraries used by the rural dwellers to seek and satisfy their information needs

In this section the opinions of the library users as rural dwellers about information sources they used to seek and satisfy their information needs from public libraries was solicited inrelation to the third research question. In terms of the information services provided, the opinions of the heads of branch libraries were solicited. In addition, the perceptions of the heads of branch/public libraries on the adequacy of the information sources as well as the library equipment/facilities available were also solicited. The opinions of the two groups were also solicited on the infrastructural facilities available in their rural areas. The requested information from each of the two groups varies; therefore the groups' opinions on the respective items were assessed independently in the tables of frequencies and percentages along with mean scores presented. Table 5.6.1 below, shows the responses of the library users on the information sources used by them, to seek and satisfy their information needs from the libraries.

Table 5.6.1: Responses of the library users on the information sources used by the rural dwellers to seek and satisfy their information needs from the libraries (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Information sources used by the library users	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Printed materials (books, journals, newspapers, magazines)	186	56.0	79	23.8	26	7.8	14	4.2	27	8.1	4.2	1.23
Town criers as a source from the library	37	11.1	55	16.6	108	32.5	107	32.2	25	7.5	2.9	1.11
Gatekeepers as a source from the library	38	11.4	26	7.8	73	22.0	162	48.8	33	9.9	2.6	1.13
Extension workers (VEWs and CHEWs) as a	31	9.3	51	15.4	67	20.2	149	44.9	34	10.2	2.7	1.14

source from the library											
Viewing centers	41	12.3	81	24.4	61	18.4	125	37.7	24	7.2	3.0	1.19
Community information resource centers	46	13.9	59	17.8	74	22.3	127	38.3	26	7.8	2.9	1.19
Audio/visuals	79	23.8	108	32.5	38	11.4	81	24.4	26	7.8	3.4	1.30
Posters and fliers	74	22.3	139	41.9	32	9.6	61	18.4	26	7.8	3.5	1.24
ICTs (e.g. computers and internet facility)	43	13.0	58	17.5	43	13.0	112	33.7	76	22.9	2.6	1.35
Other sources (unspecified)	67	20.2	44	13.3	12	3.6	15	4.5	194	58.4	2.3	1.69

From Table 5.6.1 above, it is clear that overall 79.8% of the library users strongly agreed (186; 56.0%) and agreed (79; 23.8%) that printed materials (such as books, journals, newspapers and magazines) were the most frequently used information sourcesin seeking and satisfying their information needs from public libraries. This is reflected in a mean score of 4.2 and standard deviation of 1.23 in the Table. This was attributed to the fact that the majority of people who patronized the libraries were the literate people among the rural dwellers (see Tables 5.3.3 and 5.3.5). Table 5.6.1 clearly shows that only 12% of the participants strongly disagreed (26; 7.8%) and disagreed (14; 4.2%) that they used such sources to seek and satisfy their information needs from the libraries, while 21 (8.1%) participants remained undecided. The perception of the library users also indicates that posters and fliers as information sources were rated second in the hierarchy. The responses from Table 5.6.1 reveal that 64.2% in total of the participants strongly agreed (74; 22.3%) and agreed (139; 41.9%) that they also used such information sources to seek and satisfy their information from public libraries. This is reflected in a mean score of 3.5 and a standard deviation of 1.24 in the table. The table shows that only 28% of the participants strongly disagreed (32; 9.6%) and disagreed (61; 18.4%) that such sources were used by them to seek and satisfy their information needs, while 26 (7.8%) participants remained undecided.

Other information sources used by the library users from the libraries were audio/visuals. The responses from Table 5.6.1 show that 56.3% in total of the participants strongly agreed (79; 23.8%) and agreed (108; 32.5%) that they used audio/visuals facilities to seek and satisfy their information needs from public libraries. This is reflected in a mean score of 3.4 and a standard deviation of 1.30 in the table. Based on the data from Table 5.6.1, it indicates that only 35.8% of the participants strongly disagreed (38; 11.4%) and disagreed (81; 24.4%) that they used such information sources, while 26 (7.8%) participants were undecided.

However, the responses from Table 5.6.1 showcase that overall 70.8 % of the library users strongly disagreed (73; 22.0%) and disagreed (162; 48.8%) that they used gatekeepers as information sources from the libraries. This is reflected in a mean score of 2.6 and a standard deviation of 1.13. Only 19.2% of the participants strongly agreed (38; 11.4%) and agreed (26; 7.8%) that they used such sources to seek and satisfy their information needs from the libraries, while 33 (9.9%) of the participants were undecided on this source. Likewise, the responses from Table 5.6.1 show that overall 65.1% of the participants strongly disagreed (67; 20.2%) and disagreed (149; 44.9%) that they used village extension workers and community health extension workers (VEWs and CHEWs) as information sources from the libraries to seek and satisfy their information needs. This is reflected in a mean score of 2.7 and a standard deviation of 1.14. Table 5.6.1 clearly reveals that only 24.7% in total of the participants strongly agreed (31; 9.3%) and agreed (51; 15.4%) that they used the listed item as information sources, while 34 (10.2%) participants remained undecided on the listed item.

Furthermore, the responses from Table 5.6.1 indicate that 60.6% in total of the participants strongly disagreed (74; 22.3%) and disagreed (127; 38.3%) that they used Community Information Resource Centers as information sources from public libraries to seek and satisfy their information needs. This is reflected in a mean score of 2.9 and a standard deviation of 1.19. The responses from the table show that only 30.5% of the participants strongly agreed (43; 13.0%) and agreed (58; 17.5%) that they used such sources from the libraries, while 26 (7.8%) participants remained undecided. Likewise, the responses from Table 5.6.1 it show that 64.7% in total of the participants strongly disagreed (108; 32.5%) and disagreed (107; 32.2%) that they used town criers as information sources from public libraries. This is reflected in a mean score of 2.9 and a standard deviation of 1.11. Only 27.7% of the participants strongly agreed (37; 11.1%) and agreed (55; 16.6%) that they used such sources to seek and satisfy their information needs from public libraries, while 25 (7.5%) participants remained undecided.

In a similar vein, based on the total frequencies and percentages in Table 5.6.1, it indicates that the library users did not use viewing centers as information sources from the libraries. The responses from the table indicate that 56.1% in total of the participants strongly disagreed (61; 18.4%) and disagreed (125; 37.7%) that they used viewing centers as information sources to seek and satisfy their information needs from public libraries. Only 36.7% participants strongly agreed (41; 12.3%) and agreed (81; 24.4%) that they used such

centers as information sources, while 24 (7.2%) participants remained undecided. The viewing centers are places where facilities such as television, TV programmes, videos, projectors and films are provided for educating, enlightening and entertaining people in rural areas. Likewise, the responses in Table 5.6.1 reveal that overall 46.7% of the library users strongly disagreed (43; 13.0%) and disagreed (112; 33.7%) that they used ICTs (such as computers and internet facility) as information sources from public libraries to satisfy their information needs. This is reflected in a mean score of 2.6 and a standard deviation of 1.35. Only 30.5% of the participants strongly agreed (43; 13.0%) and agreed (58; 17.5%) that they used such sources from the libraries, while 76 (22.9%) participants were undecided.

However, this impliedly shows that the library users did not acknowledge the use of other information sources like the town criers, extension workers, gatekeepers, viewing centers and ICTs (such as computers and internet facilities) from public libraries. This also revealed that the libraries under study did not incorporate oral sources in disseminating information to rural dwellers. What these findings indicated was that there was a consensus agreement between the opinions of the library users and the heads of branch libraries regarding the information sources used by rural dwellers from the libraries and the channels used by the libraries in disseminating information to the rural dwellers.

Similarly, results from the interviews with directors indicated that public libraries in the area under study used various information sources to disseminate information to rural dwellers. All the directors (5; 100%) interviewed indicated that printed materials (such as books, newspapers, magazines and journals) were the major information sources available in the libraries for the rural dwellers. However, two (40%) of the directors concurred with the library users that other information sources such as posters, radio, television and other audio/visualswere also available. However, three (60%) of the directors acknowledged the availability of ICTs in the collections of some of the branch libraries in their states. One (20%) of the directors said that only printed materials were available in their respective branch libraries. The participant noted:

> You know, there are a lot of problems that are hindering the services of the board, because the board is a public library, it is only the printed materials that are provided, we only provide our services with the printed materials, because we don't have any provision whatsoever to deliver the services pertaining non-printed materials…

A site visit to these libraries confirmed that the predominant format of information sources available for the rural dwellers in most of these libraries were printed materials. This indicates the reason why very few illiterate people patronized the library services (see Tables 5.3.3 and 5.3.5). Table 5.6.2 below shows the opinions of the heads of the branch libraries on the adequacy of the information sources in the libraries under study.

Table 5.6.2: Opinions of the heads of branch libraries on adequacy of information sources inthe libraries (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Adequacy of information sources in the libraries	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
The library has adequate information sources	14	27.5	17	33.3	9	17.6	9	17.6	2	3.9	3.6	1.18
The library has relevant information sources	17	33.3	25	49.0	4	7.8	5	9.8	-	-	4.1	0.90
The library has current information sources	11	21.6	17	33.3	12	23.5	10	19.6	1	2.0	3.5	1.10
Others (unspecified)	1	2.0	-	-	-	-	-	-	50	98.0	1.1	0.56

Table 5.6.2 above shows that the heads of branch libraries were of the opinion that the information sources available in the libraries were adequate. The responses from the table show that 60.8% in total of the participants strongly agreed (14; 27.5%) and agreed (17; 33.3%) that the information sources available in the libraries were adequate. This is reflected in a mean score of 3.9 and a standard deviation of 1.18. Based on the responses from the table, it indicates that only 35.2% of the participants strongly disagreed (9; 17.6%) and disagreed (9; 17.6%) that the information sources available in the libraries were adequate, while two (3.9%) participants were undecided. Likewise, the opinionsof the heads of branch libraries show that the information sources available in the libraries were relevant. This is indicated by 82.3% of the participants who strongly agreed (17; 33.3%) and agreed (25; 49.0%) that the information sources available were relevant to the information needs of rural dwellers. This is reflected in a mean score of 4.1 and a standard deviation of 0.90. Only 17.6% in total of the participants strongly disagreed (4; 7.8%) and disagreed (5; 9.8%) that the information sources available in the libraries were relevant, while none of the participants was undecided on the listed opinion. Similarly, the responses of the heads of branch libraries recorded in Table 5.6.2 reveal that 54.9% in total of the participants strongly agreed (11; 21.6%) and agreed (17; 33.3%) that the information sources available in the libraries under

study were current. This is reflected in a mean score of 3.5 and a standard deviation of 1.10 in the table. The table clearly shows 43.1% of the participants strongly disagreed (12; 23.5%) and disagreed (10; 19.6%) that the information sources available were current, while only one (2.0%) participant remained undecided.

However, even though the heads of branch libraries acknowledged that the information sources available in the libraries under study were adequate, relevant and current, most of the directors interviewed revealed that the information sources in these libraries were grossly inadequate and current due to poor funding of the libraries.

Most (4; 80%) of directors indicated that for years their state governments failed to provide the necessary funds for the purchase of adequate information resources and other facilities for the effective provision of public library services in the rural areas. Even in the state where the director claimed that the libraries were adequately funded by the state government, the solicited opinion of the library users indicated that the information resources available were grossly inadequate (see sections 5.8.1).

However, from the lists of the libraries' holdings (accession registers), it could be observed that the cumulative information sources available in the libraries were relatively adequate in accordance with the Librarians' Registration Council of Nigeria [LRCN] (2015) minimum standards and guidelines for public libraries in Nigeria as shown in Table 5.6.3 below:

Table 5.6.3: Relative total stock of public libraries in each state under study

S/N	State	Total no. of branch libraries	Cumulative stock available	Total population (census figure) to serve	LRCN (2015) relative minimum standard
1	Kaduna	9	96,323	6,113,503	45,000+
2	Katsina	22	7,596,391	5,801,584	110,000+
3	Jigawa	14	2,000,567	4,361,002	70,000+
4	Kebbi	5	39,501	3,256,541	25,000+
5	Zamfara	2	156,960	3,278,873	10,000+

(**Source:** Libraries' accession registers, Federal Republic of Nigeria official gazette (2009) and LRCN (2015) minimum standard and guidelines for public libraries in Nigeria).[2]

From Table 5.6.3 above, it indicates that all the libraries in the five states selected for the study met the LRCN (2015) minimum standards and guidelines for public libraries in Nigeria in terms of adequacy of the information resources available. In this regard, the opinions of the

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[2]N.B. The LRCN (2015) standards and guidelines for public libraries in Nigeria provide that for any public library serving a population of up to 35, 000+ people in the area of service, the recommended library stock should be 5000+. None of the libraries under study were serving less that 35,000 people in their area of service.

heads of the branch libraries on the adequacy of the information sources in the libraries tally with the LRCN (2015) minimum standards and guidelines for public libraries in Nigeria.

In stark contrast to the opinions of the heads of the branch libraries in terms of currency of the information resources available in the libraries, most of them were outdated as clarified by most of the directors (4, 80%) interviewed. They were of the opinion that the problem of poor funding had been adversely affecting the adequacy and currency of the information resources in the libraries. One of the participants noted:

> …it affects, because there is no way that we can get adequate resources to provide our services if there is poor funding, in fact most of the books on the shelves have been there for the past 15 years or so since when the library was built, and the library materials need to be updated, almost all the materials are obsolete.

In a nutshell, the general opinion of the directors interviewed was that the libraries should be adequately funded to eliminate of all these challenges (see section 5.8). Table 5.6.4 below shows the opinions with the mean scores of the heads of the branch libraries on the information services provided to rural dwellers.

Table 5.6.4: Responses of heads of branch libraries on information services provided by libraries to rural dwellers (N=51)

Does your library provide these Services to rural dwellers?	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Traditional services (reference services, circulation services, lending services, serial services, children services, etc.)	36	70.6	10	19.6	2	3.9	2	3.9	1	2.0	4.5	0.90
Mobile library services	2	3.9	4	7.8	23	45.1	19	37.3	3	5.9	2.7	0.86
Information repackaging	3	5.9	9	17.6	20	39.2	14	27.5	5	9.8	2.8	1.03
Awareness campaigns on government policies	8	15.7	19	37.3	12	23.5	9	17.6	3	5.9	3.4	1.13
Translation services	5	9.8	8	15.7	24	47.1	9	17.6	5	9.8	3.0	1.07
Organizing meetings, workshops, seminars and exhibitions for rural dwellers to enhance their living condition	10	19.6	12	23.5	14	27.5	11	21.6	4	7.8	3.3	1.23
Adult literacy programmes	8	15.7	16	31.4	16	31.4	9	17.6	2	3.9	3.4	1.08
Other services (current	-	-	2	3.9	-	-	-	-	49	96.1	1.1	0.59

awareness services, selective dissemination of information and referral services)											

Table 5.6.4 above shows that services provided by public libraries in the North-Western zone of Nigeria were mostly traditional services (such as reference services, circulation services, lending services, serials services and services for children) to the rural dwellers. This was indicated by the mean scores of 4.5 and a standard deviation of 0.90. The responses in Table 5.6.4 show thatoverall 90.2%of the participantswho strongly agreed (36; 70.6%) and agreed (10; 19.6%) that such services were provided. However, the heads of branch libraries who strongly disagreed (2; 3.9%) and disagreed (2; 3.9%) about the provision of these traditional services were negligible as indicated by only 7.8% of them. The table also indicates that only one (2.0%) participant was undecided on the listed item. The second item in the ranking was the provision of awareness campaign on government policies. The responses in Table 5.6.4 show that overall 53% of the participants strongly agreed (8; 15.7%) and agreed (19; 37.3%) respectively that such information service was provided by the libraries. This is reflected in a mean score of 3.4 and a standard deviation of 1.13. The table shows that only 41.1% of the participants strongly disagreed (12; 23.5%) and disagreed (17.6%) that the libraries provided such services, while three (5.9%) participants were undecided on the listed opinion.

However, responses from Table 5.6.4 reveal that in the perceptions of heads of branch libraries, mobile library services and information repackaging were not provided by the libraries under study. The responses show that 82.4% in total of the participants strongly disagreed (23; 45.1%) and disagreed (19; 37.3%) that mobile library services were provided to rural dwellers. This is reflected in a mean score of 2.7 which shows disagreement.Only 11.7% of the participants strongly agreed (2; 3.9%) and agreed (4; 7.8%) that this service was provided by the libraries in the rural areas, while three (5.9%) participants were undecided. Likewise, the responses in Table 5.6.4 show that overall 66.7% of the participants strongly disagreed (20; 39.2%) and disagreed (14; 27.5%) that information repacking service was provided by the libraries in the area under study. This is reflected in a mean score of 2.8 and a standard deviation of 1.03. Only 23.5% in total of the participants strongly agreed (3; 5.9%) and agreed (9; 17.6%) that the service in question was provided by the libraries in the area under study. The table also reveals that five (9.8%) participants remained undecided on the listed item.

Nevertheless, it is noteworthy that based on the total frequencies and percentages reflected in Table 5.6.4, the heads of branch libraries did not agree that the libraries provided translation services and adult literacy programmes for rural dwellers. The data also indicates that they did not agree that the libraries organized meetings, workshops, seminars and exhibitions as information services for rural dwellers.

In this regard, the responses from Table 5.6.4 reveal that 64.7% in total of the participants strongly disagreed (24; 47.1%) and disagreed (9; 17.6%) that translation services were provided by public libraries in the area under study. The table shows that only 25.5% participants of the study strongly agreed (5; 9.8%) and agreed (8; 15.7%) that such services were provided by the libraries, while five (9.8%) participant remained undecided. Likewise, the responses from Table 5.6.4 reveal that 49.1% in total of the participants strongly disagreed (14; 27.5%) and disagreed (11; 21.6%) that the libraries under study organized meetings, workshops, seminars and exhibitions for rural dwellers. The table shows that only 43.1% of participants strongly agreed (10; 19.6%) and agreed (12; 23.5%) that such services were provided by the libraries, while four (7.8%) participants remained undecided. Similarly, the responses in Table 5.6.4 indicates that overall 49% of the participants strongly disagreed (16; 31.4%) and disagreed (9; 17.6%) that the libraries under study provided adult literacy programmes as information service. Only 47.1% of the participants strongly agreed (8; 15.7%) and agreed (16; 31.4%) that such service was provided by the libraries, while two (3.9%) participants were undecided.

All the directors (5; 100%) interviewed unanimously agreed that the dominant library services provided in the branch libraries were traditional services as was acknowledged by the heads of the branch libraries. However, only two (40%) of the directors acknowledged the provision of other services such as organizing seminars and workshops, debates and competitions, adult literacy programmes and extension services in their branch libraries. For example, one of the participants noted:

> Yes, actually in this state, the library has been in the forefront in organizing seminars and workshops most especially with the local government areas so as to enhance the use of the library. We normally do that with a visit in collaboration with the local government areas to organize seminars, workshops and other similar things like that…

In an ideal situation, the information services provided by public libraries are expected to make a significant impact on the lives of library users patronizing the services. In this regard, the opinions of the library users who participated in the study were solicited in order to assess whether or not the information services provided to them impacted on their lives as rural dwellers. This opinion was presented in frequencies and percentages along with mean scores for the respective items in Table 5.6.5 below.

Table 5.6.5: Opinions of the library users on the impact made by the information services provided on the lives of rural dwellers in the area under study (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Impact of the library services on the lives rural dwellers	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
In terms of education	170	51.2	97	29.2	7	2.1	16	4.8	42	12.7	4.0	1.37
In terms of adult literacy	94	28.3	80	24.1	19	5.7	59	17.8	80	24.1	3.1	1.58
In terms of skills acquisition/occupation	95	28.6	87	26.2	36	10.8	66	19.9	48	14.5	3.3	1.44
In terms of economy	96	28.9	96	28.9	52	15.7	60	18.1	28	8.4	3.5	1.30
In terms of well being	84	25.3	105	31.6	49	14.8	64	19.3	30	9.0	3.4	1.30
In terms of farming activities	77	23.2	100	30.1	42	12.7	79	23.8	34	10.2	3.3	1.33
In terms of health related issues	103	31.0	107	32.2	29	8.7	71	21.4	22	6.6	3.6	1.30
In terms of awareness on government policies and programmes	96	28.9	152	45.8	33	9.9	24	7.2	27	8.1	3.8	1.17
In terms of cultural and recreational activities	75	22.6	67	20.2	42	12.7	96	28.9	52	15.7	3.1	1.42
Others (unspecified)	29	8.7	24	7.2	12	3.6	17	5.1	250	75.3	1.7	1.33

Table 5.6.5 aboveindicates that the main impact made bythe information services on the lives of the rural dwellers was felt in their educational lives. The responses from the table show that 80.4% in total of the participants strongly agreed (170; 51.2%) and agreed (97; 29.2%) that the information services provided by the libraries made a significant impact on their educational lives. This is reflected in a mean score of scored 4.0 and a standard deviation of 1.37. Only 6.9% of the participants strongly disagreed (7; 2.1%) and disagreed (16; 4.8%) that the listed item had such impact on their lives, while 42 (12.7%) participants remained undecided. The perceptions of the library users indicated that the information services provided had increased awareness about government policies and programmes to rural dwellers. This opinion was indicated by overall 74.7% of the participants who strongly

agreed (96; 28.9%) and agreed (152; 45.8%) that the information services provided by the libraries impacted on their lives in terms of awareness on government policies. This is reflected in a mean score of 3.8 and a standard deviation of 1.17. The data also reveals that only 17.1% of the participants strongly disagreed (33; 9.9%) and disagreed (24; 7.2%) that the information services made impact on their awareness on government policies and programmes, while 27 (8.1%) participants were undecided.

Furthermore, the perceptions of the library users reveal that the information services provided by the libraries had a significant impact on their lives in terms of increased knowledge on health related issues. The responses in Table 5.6.5 show that overall 63.2% of the participants strongly agreed (103; 31.0%) and agreed (107; 32.2%) that the information services provided had such impact on their lives. This is reflected in a mean score of 3.6 and a standard deviation of 1.30. Only 30.1% in total of the participants strongly disagreed (29; 8.7%) and disagreed (71; 21.4%) that the information services provided made such impact on their lives, while 22 (6.6%) participants remained undecided. Likewise, the library users were of the opinion that the services provided made impact on their economic activities. The responses from Table 5.6.5 show that 57.8% in total of the participants strongly agreed (96; 28.9%) and agreed (96; 28.9%) that the services provided had such impact on their lives. This is reflected in a mean score of 3.5 and a standard deviation of 1.30. The responses from the table also reveal that 33.8% of the participants strongly disagreed (52; 15.7%) and disagreed (60; 18.1%) that the services made impact on their economic activities, while 28 (8.4%) of the participants were undecided.

Similarly, in the opinion of the library users the information services provided by the libraries made significant impact on their wellbeing. The responses in Table 5.6.5 reveal that overall 56.9% of the participants strongly agreed (84; 25.3%) and agreed (105; 31.6%) that the information services provided by public libraries had such impact on their lives. This is reflected in a mean score of 3.4 and a standard deviation of 1.30 in the table. The data reveals that only 34.1% of the participants strongly disagreed (49; 14.8%) and disagreed (64; 19.3%) that the information services provided made impact on their lives in terms of wellbeing, while 30 (9.0%) participants remained undecided on the listed item. Likewise, the responses from Table 5.6.5 show that 54.8% in total of the participants strongly agreed (95; 28.6%) and agreed (87; 26.2%) that the information services provided by the libraries had a significant impact on their lives in terms of skills acquisition/occupation. This is reflected in a mean

score of 3.3 and a standard deviation 1.44. Only 30.7% of the participants strongly disagreed (36; 10.8%) and disagreed (66; 19.9%) that the services provided had impacted on their lives in terms of the listed option, while 48 (14.5%) participants were undecided on the listed item. From the opinions of the library users, it indicates that the information services provided by the libraries also made a significant impact on their lives in terms of improved farming activities. This was indicated by 53.3% of the participants who strongly agreed (77; 23.2%) and agreed (100; 30.1%) that the services made such impact on their lives. This is also reflected in a mean score of 3.3 and a standard deviation of 1.33 in Table 5.6.5. Based on the responses from the table, it indicates that only 36.5% in total of the participants strongly disagreed (42; 12.7%) and disagreed (79; 23.8%) on the listed item, while 34 (10.2%) participants remained undecided.

The other impact made by the library services were on adult literacy level as well as improved cultural and recreational activities. The responses from Table 5.6.5 show that 52.4% in total of the participants strongly agreed (94; 28.3%) and agreed (80; 24.1%) that the information services provided by public libraries in the area under study had made significant impact on their lives in terms of their literacy level. This is reflected in a mean score of 3.1 and a standard deviation of 1.58. Based on the responses from the table, it clearly show that only 23.5% of the participants strongly disagreed (19; 5.7%) and disagreed (59; 17.8%) that the services provided by the libraries made such impact on their lives, while 80 (24.1%) participants remain undecided on the listed item. Similarly, responses from Table 5.6.5 show that 42.8% in total of the participants strongly agreed (75; 22.6%) and agreed (67; 20.2%) that the information services provided had impacted on their lives in terms of cultural and recreational activities. This is reflected in a mean score of 3.1 and a standard deviation of 1.42. The table indicates that only 41.6% of the participants strongly disagreed (42; 12.7%) and disagreed (96; 28.9%) that the services in question had such impact on their lives, while 52 (15.7%) participants were undecided.

Therefore, from the expressed opinions indicated in Table 5.6.5 above, it can be concluded that the information services provided by the public libraries in the area under study had made a significant impact on the lives of the library users despite the major challenges facing the libraries (see section 5.8). However, it is noteworthy that the majority of the library users as indicated in the preceding sections were the literate people, as the majority of illiterate rural dwellers were not even aware of the library services. Consequently, this resulted in the

lack of patronage of the library services by most of the rural dwellers. As such this impact perhaps might only be on the lives of the literate rural dwellers who based on the estimates were less than 30% of the total population in rural areas in Nigeria.

Library equipment/facilities are essential in the provision of effective information services in the rural areas. In this regard, the opinions of heads of branch libraries were sampled on the availability of equipment/facilities in the libraries for effective provision of information services in the rural areas. The expressed opinions are presented in Table 5.6.6 below.

Table 5.6.6: Opinions of heads of branch libraries on equipment/facilities available in the libraries (N=51)
SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Equipment/facilities available in the libraries	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Vehicles/vans	2	3.9	3	5.9	26	51.0	17	33.3	3	5.9	2.7	0.84
Good reading furniture	11	21.6	24	47.1	7	13.7	8	15.7	1	2.0	3.7	1.04
Pro-type library building	10	19.6	11	21.6	18	35.3	12	23.5	-	-	3.4	1.06
ICT facilities	6	11.8	8	15.7	22	43.1	15	29.4	-	-	3.1	0.96
None of the above	4	7.8	5	9.8	8	15.7	13	25.5	21	41.2	2.2	1.29
Others (nil)	-	-	-	-	-	-	-	-	51	100.0	1.0	0.00

From Table 5.6.6 above, the perceptions of the heads of the branch libraries indicate that the libraries under study had no vehicles/vans. This is seen in response to the first item in the table where overall 84.3% of the participants strongly disagreed (26; 51.0%) and disagreed (17; 33.3%) with the suggestion that the libraries have vehicles/vans. The mean score for the item is 2.7, far below the midpoint average of 3.0. From the responses in the table, it indicates that only 9.8%of the participants agreed (2; 3.9%) and agreed (3; 5.9%) that the libraries had vehicles/vans, while three (5.9) participants remained undecided. But the heads of branch libraries agreed that the libraries had good furniture for readers. This seen in response to the second item in the table where 68.7% in total of the participants strongly agreed (11; 21.6%) and agreed (24; 47.1%) with the suggestion that the libraries had good reading furniture. This is reflected in a means score of 3.7 and the standard deviation of 1.04. Only 29.4% of the participants strongly disagreed (7; 13.7%) and disagreed (8; 15.7%) that the libraries had such facilities, while only one (2.0%) participant remained undecided.

However, it is noteworthy that based on the total frequencies and percentages reflected in Table 5.6.6, most of the heads of branch libraries did not agree that the libraries were occupying proto-type buildings. In addition they did not agree that ICT facilities were available in the libraries.In this regard, from the perception of the heads of branch libraries it indicates that 58.8% in total of the participants strongly disagreed (18; 35.3%) and disagreed (12; 23.5%) with the suggestion that the libraries occupied proto-type buildings. The data reveals that only 41.2% of the participants strongly agreed (10; 19.6%) and agreed (11; 21.6%) with the opinion that the libraries had such buildings, while none of the participants was undecided on the suggestion. Similarly, the responses in Table 5.6.6 show that 72.5%in total of the participants strongly disagreed (22; 43.1%) and disagreed (15; 29.4%) that ICT facilities were available in the libraries. Only 27.5% of the participants strongly agreed (6; 11.8%) and agreed (8; 15.7%) with the suggestion that ICT facilities were available in the libraries, while none of the participants was undecided on the suggestion.

Closely related were rural infrastructural facilities which are another important factor in the provision and accessibility of information services in the rural areas. In line with this, the opinions of the heads of branch libraries and library users were assessed independently on the available facilities in their respective rural areas. The perceptions of the heads of the branch libraries with the mean scores are presented in Table 5.6.7 below.

Table 5.6.7: Responses of heads of branch libraries on the infrastructural facilities available in their rural areas (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Are these infrastructural facilities available in your rural areas?	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Electricity power supply	15	29.4	15	29.4	7	13.7	14	27.5	-	-	3.6	1.18
Effective telecommunication system	11	21.6	17	33.3	8	15.7	15	29.4	-	-	3.5	1.14
Good road networks	12	23.5	19	37.3	6	11.8	12	23.5	2	3.9	3.5	1.21
Good transport system	11	21.6	22	43.1	5	9.8	12	23.5	1	2.0	3.6	1.13
Other facilities (water and good health centers)	1	2.0	-	-	-	-	-	-	50	98.0	1.1	0.56

Table 5.6.7 above show that the heads of branch libraries were of the opinion that infrastructural facilities were available in their rural areas. This is indicated by a high mean score of 3.6 for electricity power supply. The table shows that 58.8% in total of the participants strongly agreed (15; 29.4%) and agreed (15; 29.4%) that there was electricity

supply in the rural areas. Only 27.4% of the participants strongly disagreed (7; 13.7%) and disagreed (7; 13.7%) with the suggestion. The table indicates that none of the participants remained undecided on the listed item. Similarly, in the opinions of the heads of branch libraries there was effective telecommunication system in the rural areas. The responses in Table 5.6.7 indicate that overall 54.9% of the participants strongly agreed (11; 21.6%) and agreed (17; 33.3%) with the suggestion that there was effective telecommunication system in the rural areas. This is indicated with a mean score of 3.5 and a standard deviation of 1.14. Table5.6.7 shows that 45.1% of the participants strongly disagreed (8; 15.7%) and disagreed (15; 29.4%) that there was such infrastructure in the rural areas, while none of the participants was undecided on the suggestion.

Furthermore, the responses from Table 5.6.7 show that 64.7% in total of the participants strongly agreed (11; 21.6%) and agreed (22; 43.1%) that there was good transport system in the rural areas. This is also reflected in a mean score of 3.6 and a standard deviation of 1.13. Only 33.3% of the participants strongly disagreed (5; 9.8%) and disagreed (12; 23.5%) that there was good transport system in the rural areas, while only one (2.0%) participant was undecided on the suggestion. Likewise, from the opinion of the heads of branch libraries, it indicates that there weregood road networks in the rural areas. This was indicated by 60.8% of the participants who strongly agreed (12; 23.5%) and agreed (19; 37.3%) with the suggestion that there was such infrastructure in the rural areas. This is also reflected in a mean score of 3.5 and a standard deviation of 1.21. The responses in the table show that only 35.3% strongly disagreed (6; 11.8%) and disagreed (12; 23.5%) that there was good road networks in the rural areas, while only two (3.9%) participants remained undecided. Similarly, Table 5.6.8 below shows the mean scores of the perceptions of the library users on the availability of infrastructural facilities in their respective rural areas.

Table 5.6.8: Responses of the library users on infrastructural facilities available in their rural areas (N=332)
SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Are these Infrastructural facilities available in your rural area?	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Rural electricity	117	35.2	122	36.7	35	10.5	42	12.7	16	4.8	3.8	1.17
Good telecommunication services	84	25.3	145	43.7	33	9.9	52	15.7	18	5.4	3.7	1.17
Good road networks/	93	28.0	105	31.6	61	18.4	65	19.6	8	2.4	3.6	1.15

accessible roads											
Good transport systems	67	20.2	92	27.7	56	16.9	75	22.6	42	12.7	3.2	1.33
Portable water	78	23.5	94	28.3	66	19.9	81	24.4	13	3.9	3.4	1.20
Good health services	78	23.5	119	35.8	40	12.0	73	22.0	22	6.6	3.5	1.25
Education	75	22.6	114	34.3	37	11.1	32	9.6	74	22.3	3.3	1.48
Others (unspecified)	67	20.2	54	16.3	8	2.4	9	2.7	194	58.4	2.4	1.72

The mean scores in Table 5.6.8 above, shows that the library users were in agreement with the heads of branch libraries on infrastructural facilities available in their respective rural areas. The responses from the table indicate that overall 71.9% of the participants strongly agreed (117; 35.2%) and agreed (122; 36.7%) that there was rural electricity in their rural areas. This is reflected in a mean score of 3.8 and a standard deviation of 1.17. The table shows that only 23.2% of the participants strongly disagreed (35; 10.5%) and disagreed (42; 12.7%) that there was the infrastructure in their rural areas, while 16 (4.8%) participants were undecided. Likewise, the table reveals that 69% in total of the participants strongly agreed (84; 25.3%) and agreed (145; 43.7%) with the suggestion that there wasgood telecommunication services in their rural areas. This is also reflected in a mean score of 3.7 and a standard deviation of 1.17. Only 25.6% of the participants strongly disagreed (33; 9.9%) and disagreed (52; 15.7%) that there was this infrastructure in their rural areas, while 18 (5.4%) of the participants remained undecided.

Furthermore, the library users were of the opinion that there weregood road networks/accessible roads in the rural areas. The responses in Table 5.6.8 reveal that 59.6% of the participants strongly agreed (93; 28.0%) and agreed (105; 31.6%) that there was this infrastructure. This is also indicated with a mean score of 3.6 and a standard deviation of 1.15 in the table. Only 38% of the participants strongly disagreed (61; 18.4%) and disagreed (65; 19.6%) that the infrastructure is available in their rural areas, while eight (2.4%) participants remained undecided. The perceptions of the library users indicate that next in the hierarchy were good transport systems. The responses from Table 5.6.8 show that 47.9% in total of the participants strongly agreed (67; 20.2%) and agreed (92; 27.7%) that there was this infrastructure in their rural areas. This is reflected in a mean of 3.2 and standard deviation of 1.33 in the table. The table shows that only 39.5% of the participants strongly disagreed (56; 16.9%) and disagreed (75; 22.6%) that there was good transport system in their rural areas, while 42 (12.6%) participants were undecided.

Furthermore, in the opinion of the library users there weregood health services in their rural areas.The responses in Table 5.6.8 show that overall 59.3% of the participants strongly agreed (78; 23.5%) and agreed (119; 35.8%) that there was good health services in their rural areas. This is also reflected in a mean score of 3.5 and a standard deviation of 1.25.From the data, it indicates that only 34% of the participants strongly disagreed (40; 12.0%) and disagreed (73; 22.0%) that there was this infrastructure in their rural areas, while 22 (6.6%) participants remained undecided. Likewise, the responses from the table also show that 56.9% of the library users strongly agreed (75; 22.6%) and agreed (114; 34.3%) that there was educational infrastructure in their rural areas. This opinion is also reflected in a mean score of 3.3 in Table 5.6.8. Only 20.7% in total of the participants strongly disagreed (37; 11.1%) and disagreed (32; 9.6%) with the suggestion made in the table, while 74 (22.3%) of the participants remained undecided.

Similarly, Table 5.6.8 shows that 51.8% in total of the library users involved in this study strongly agreed (78; 23.5%) and agreed (94; 28.3%) that there was portable water in their rural areas. This is also indicated with a mean score 3.4 and a standard deviation of 1.20. The table shows that only 44.3% of the participants strongly disagreed (66; 19.9%) and disagreed (81; 24.4%) that there was portable water in their rural areas, while 13 (3.9%) participants were undecided on the suggested item.

Rural infrastructural facilitates are essential in the provision and utilization of public library services in the rural areas. They facilitate the provision of the services on the part of public libraries. Similarly, rural infrastructural facilities facilitate easy access to library services by the library users. Notwithstanding, on the other hand, all the three groups of participants acknowledged the lack of infrastructural facilities in most of the rural areas was among the major challenges faced in the provision and use of public library services in the rural areas (see section 5.8. and Appendix VII).

Notable from the interviews were other issues involved in the provision of public library services in rural areas such as laws/policies establishing the libraries, staffing, funding, library buildings, provision of information resources, library equipment and facilities. In this regard, all the directors (100%) of the state library boards revealed that all the libraries in the area under study were established by edicts promulgated in different time periods. Some of these states (60%) were created from other states, as such the edicts that established libraries in the defunct states were still maintained. Generally, based on the provisions made in these

edicts, issues surrounding funding, staffing, library buildings, provision of information resources and library equipment were the sole responsibility of the respective state governments. However, in some states the Federal government, local governmentsand some other donor agencies donate voluntarily to the activities of the libraries. One of the participants noted:

> Yes, the state government is solely responsible for all these issues, but there are instances whereby the Federal Government and local governments chip in and other donor agencies that come with their donations, but the sole financier is the state government…

Details about the current trends on these issues were captured in the opinions of the heads of the branch libraries and the directors of the state library boards in section 5.8.3.

5.7 Channels used by the public libraries to disseminate information to rural dwellers

In this section assessment of channels used by the public libraries to disseminate information to rural dwellers was carried out in line with the fourth objective and research question. The channels examined included the use of printed materials and centralized library services at the local government headquarters. Other channels included the use of extension workers, town criers, audio/visuals and ICTs. From the point of view of the heads of branch libraries the channels used by the libraries to disseminate information to rural dwellers mostly involved the use of printed materials and centralized library services at the local government headquarters. The opinions of the heads of branch libraries on the items are tabulated in frequencies and percentages in Table 5.7.

Table 5.7: Responses of the heads of branch libraries on channels used by the public libraries to disseminate information to rural dwellers (N=51)
SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided

Channels used by the public libraries to disseminate information to rural dwellers	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Printed materials	36	70.6	12	23.5	-	-	1	2.0	2	3.9	4.5	0.92
Centralized library services at the local government headquarters'	25	49.0	21	41.2	2	3.9	1	2.0	2	3.9	4.3	0.94
Community	8	15.7	14	27.5	16	31.4	10	19.6	3	5.9	3.3	1.13

information resource centers												
Gatekeepers	4	7.8	7	13.7	21	41.2	17	33.3	2	3.9	2.9	0.97
Extension workers	6	11.8	10	19.6	17	33.3	16	31.4	2	3.9	3.0	1.08
Use of ICTs	8	15.7	5	9.8	23	45.1	15	29.4	-	-	3.1	1.01
Town criers	3	5.9	10	19.6	21	41.2	16	31.4	1	2.0	3.0	0.92
Audio/visuals	12	23.5	19	37.3	12	23.5	8	15.7	-	-	3.7	1.01
Posters and fliers	13	25.5	26	51.0	1	2.0	7	13.7	4	7.8	3.7	1.22
Others (unspecified)	-	-	-	-	1	2.0	-	-	50	98.0	1.0	0.28

The opinions of the heads of branch libraries as indicated in Table 5.7 aboverevealed that printed materials were the major channels through which information is disseminated to rural dwellers by the libraries. It indicates that 94.1% in total of the participants strongly agreed (36; 70.6%) and agreed (12; 23.5%) that printed materials were the major channels used in disseminating information to rural dwellers. This is reflected in a mean score of 4.5 and a standard deviation of 0.92. Based on the responses from Table 5.7, it clearly shows that only one (2.0%) participant disagreed with the opinion, while two (3.9%) participants remained undecided. Centralized libraryservices at the local government headquarters was the next channel used by public libraries to disseminate information to rural dwellers in the area under study. This is indicated with a mean score of 4.3 and a standard deviation of 0.94. Responses from Table 5.7 show that overall 90.2% of the participants strongly agreed (25; 49.0%) and agreed (21; 41.2%) respectively that the libraries used centralized services to disseminate information to rural dwellers. The table shows that only 5.9% of the participants strongly disagreed (1; 2.0%) and agreed (2; 3.9%) with this opinion, while two (3.9%) participants remained undecided.

Furthermore, from the opinion of the heads of branch libraries, posters and fliers were also used by public libraries in disseminating information to rural dwellers. The responses in Table 5.7 show that 76.5% of the participants strongly agreed (13; 25.5%) and agreed (26; 51.0%) respectively that the libraries used these channels to disseminate information to rural dwellers. This is also reflected in a mean score of 3.7 and a standard deviation of 1.22. The table indicates that only 15.7% in total of the participants strongly disagreed (1; 2.0%) and disagreed (7; 13.7%) that the libraries used such channels to disseminate information to rural dwellers, while four (7.8%) participants were undecided. Likewise, the heads of branch libraries were of the view that the libraries also disseminate information to rural dwellers by using audio/visuals facilities. This opinion is seen in a mean score of 3.7 and a standard deviation of 1.01. The responses from Table 5.7 show that 60.8% in total of the participants

strongly agreed (12; 23.5%) and agreed (19; 37.3%) with the opinion that audio/visuals were among the channels used by the libraries to disseminate information to rural dwellers in the area under study. The data reveals that only 39.2% of the participants strongly disagreed (12; 23.5%) and disagreed (8; 15.7%) this channel was used in disseminating information to rural dwellers, while none of the participants was undecided on the listed item.

At this juncture, it is also noteworthy that based on the total frequencies and percentages reflected in Table 5.7, most of the heads of branch libraries did not agree that Community Information Resource Centers, ICTs and town criers were used as channels by the libraries to disseminate information to rural dwellers.

Accordingly, from the responses in Table 5.7, it indicates that 51% in total of the participants strongly disagreed (16; 31.4%) and disagreed (10; 19.6%) that Community Information Resource Centers were used in disseminating information to rural dwellers. The responses in the table indicate that only 43.1% of participants strongly agreed (8; 15.7%) and agreed (14; 27.4%) that the libraries used such centers to disseminate information to rural dwellers, while three (5.9%) participants remained undecided. Likewise, the responses from Table 5.7 reveal that 74.5% in total of the participants strongly disagreed (23; 45.1%) and disagreed (15; 29.4%) that ICTs were used by the libraries to disseminate information to rural dwellers. It also shows that only 25.5% of the participants strongly agreed (8; 15.7%) and agreed (5; 9.8%) that the facilities were used in disseminating information to rural dwellers, while none of the participants was undecided. Similarly, the responses in Table 5.7 also show that overall 72.6% of the participants strongly disagreed (21; 41.2%) and disagreed (16; 31.4%) that town criers were used by the libraries to disseminate information to rural dwellers. Only 25.5% of the participants strongly agreed (3; 5.9%) and agreed (10; 19.6%) that town criers were used by the libraries to disseminate information to rural dwellers, while only one (2.0%) participants was undecided on the listed item.

In a similar vein, the responses from Table 5.7 show that more than 74.5% in total of the participants strongly disagreed (21; 41.2%) and disagreed (17; 33.3%) that gatekeepers were used by public libraries in disseminating information to rural dwellers. It is also reveals that only 21.5% of the participants strongly agreed (4; 7.8%) and agreed (7; 13.7%) that gatekeepers were used by the libraries to disseminate information to rural dwellers, while two (3.9%) participants remained undecided. Likewise, the responses in Table 5.7 indicate that 64.7% of the participants strongly disagreed (17; 33.3%) and disagreed (16; 31.4%) that

extension workers were used by the libraries in disseminating information to rural dwellers. Only 31.4% in total of the participants strongly agreed (6; 11.8%) and agreed (10; 19.6%) that such workers were also used by the libraries to disseminate information to rural dwellers, while two (3.9%) participants were undecided.

Unsurprisingly, the library users were in agreement with the heads of branch libraries that public libraries disseminate information to them largely through printed materials, audio/visuals, posters and fliers as information sources. They also did not agree that Community Information Resource Centers, ICTs, extension workers and town criers were used in disseminating information to them (see section 5.6.1).

Similarly, all the directors (5; 100%) interviewed also echoed their sentiment thatthe libraries did not use channels such as town criers, extension workers and Community Information Resource Centers in disseminating information to rural dwellers. One of the participants noted:

> In the branch libraries we only deal with the printed materials such as books, newspapers and journals. And actually, not all the branches deal with newspapers, about 2/3 of them only deal with books which are supplied from the state government.

In a nutshell, all the directors (5; 100%) interviewed, confirmed theresponses acknowledged that the major information sourcesavailable in the libraries for rural dwellers were printed materials (such as books, newspapers, magazines and journals). Other sources available as acknowledged by three (60%) of the directors were radio, television, audio/visuals, posters, while some (4; 80%) of the directors indicated the availability of ICTs in some of their branch libraries. From site visit of these libraries, it was observed that although these ICTs were available in a few of these libraries but were not in good use due to poor infrastructure as indicated in section 5.8.

5.8 Challenges faced by rural dwellers in seeking and using information from public libraries

In this section the challenges faced by rural dwellers in seeking and using information from public libraries were assessed from the perspective of the library users. An attempt was also made at soliciting their opinions on how the identified challenges could be addressed.

Similarly, the opinions of the heads of branch libraries and directors of the state library boards were also solicited about the challenges associated with provision of public library services in the rural areas. An attempt was also made at soliciting their opinions on how the identified challenges could be delt with. Table 5.8.1 below shows the opinions of the library users about the challenges they faced as rural dwellers in seeking and using information from public libraries.

Table 5.8.1: Opinions of the library users about the challenges they faced in seeking and using information from the public libraries (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Challenges faced by rural dwellers in seeking and using in information from the public libraries	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Absence of library services in rural communities	181	54.5	96	28.9	14	4.2	14	4.2	27	8.1	4.2	1.21
Centralization of library services at the local governments headquarters'	170	51.2	127	38.3	9	2.7	15	4.5	11	3.3	4.3	0.97
Ineffective library services in rural communities	153	46.1	126	38.0	16	4.8	32	9.6	5	1.5	4.2	1.00
Inadequate or inappropriate information resources	145	43.7	136	41.0	23	6.9	16	4.8	12	3.6	4.2	1.00
Absence of community information resource centers in rural areas	162	48.8	119	35.8	8	2.4	39	11.7	4	1.2	4.2	1.03
Language barrier	144	43.4	88	26.5	40	12.0	48	14.5	12	3.6	3.9	1.21
Lack of qualified library personnel	139	41.9	108	32.5	25	7.5	31	9.3	29	8.7	3.9	1.28
Lack of basic infrastructural facilities in rural communities	137	41.3	115	34.6	21	6.3	24	7.2	35	10.5	3.9	1.31
Poor telecommunication systems	129	38.9	128	38.6	30	9.0	20	6.0	25	7.5	4.0	1.18
Economic constraint	94	28.3	104	31.3	25	7.5	17	5.1	92	27.7	3.3	1.59
Lack of internet and electricity	75	22.6	37	11.1	11	3.3	2	.6	207	62.3	2.3	1.75

From Table 5.8.1 above, it can be seen that centralization of library services at the local government headquarters was the biggest challenge faced by the rural dwellers in seeking and using information from public libraries in the area under study. The responses in the table

show that 89.5% of the participants strongly agreed (170; 51.2%) and agreed (127; 38.3%) that the library services were centralized at the local government headquarters. This is also reflected in a mean score of 4.3 and the standard deviation of 0.97. The table also showed that only 7.2% in total of the participants strongly disagreed (9; 2.7%) and disagreed (5; 4.5%) with this fact, while 11 (3.3%) participants remained undecided. A typical rural dweller had to travel a distance from his/her rural community to the local government headquarters to seek and use information from a public library which was problematic given poor transport facilities and costs and time involved to get to the libraries.

Associated with this challenge was the absence of library services in rural communities. The responses from Table 5.8.1 indicate that 83.4% of the library users in total strongly agreed (181; 54.5%) and agreed (96; 28.9%) that the library services were non-existent in rural communities. This fact is reflected in a mean score of 4.2 and standard deviation of 1.21 as shown in the table. Only 8.4% of the participants strongly disagreed (14; 4.2%) and disagreed (14; 4.2%) that there was absence of library services in rural communities, while 27 (8.1%) participants were undecided. The library users also acknowledged the centralized library services that were available at the local government headquarters were ineffective for the demands of rural dwellers. The responses from Table 5.8.1 confirm that overall 84.1% of the participants strongly agreed (153; 46.1% and agreed (126; 38.0%) that library services in these centralized libraries were ineffective. This is also reflected in a mean score of 4.2 in the table. Only 14.4% of the participants strongly disagreed (16; 4.8%) and disagreed (32; 9.6%) with this fact, while five (1.5%) participants remained undecided.

Likewise, the library users confirmed that the information resources in the libraries were inadequate or inappropriate for the demands of rural dwellers. The responses in Table 5.8.1 reveal that 84.7%   of the participants strongly agreed (145; 43.7%) and agreed (136; 41.0%) that the library resources were inadequate or inappropriate. The table also reveals that only 11.7% of the participants strongly disagreed (23; 6.9%) and disagreed (16; 4.8%) with this opinion, while 12 (3.6%) participants were undecided. It was also acknowledged by the library users that there was an absence of Community Information Resource Centers in rural areas which would be extensions of the centralized libraries. The responses from Table 5.8.1 confirm that 84.6% of the participants strongly agreed (162; 48.8%) and agreed (119; 35.8%) that such centers were non-existent in the rural areas. This is also reflected in a mean score of 4.2 and a standard deviation of 1.03. Only 14.1% of the participants strongly disagreed (8;

2.4%) and disagreed (39; 11.7%) that there was an absence of such centers in rural communities, while four (1.2%) remained undecided.

Another challenge faced by the rural dwellers in seeking and using information from public libraries was language barrier. The responses in Table 5.8.1 show that overall 69.9% of the library users involved in this study strongly agreed and agreed (144 and 43.4% and 88 and 26.5%) that language was such a challenge among the illiterate rural dwellers. This opinion is indicated with an average mean score of 3.9 and standard deviation of 1.21 in the table. It is obvious from the table that only 26.5% of the participants strongly disagreed (40; 12.0%) and disagreed (48; 14.5%) that language was a barrier between the information sources available and the ability of the illiterate rural dwellers in question to use them, while 12 (3.6%) of participants were undecided. It was also the perception of the library users that the libraries lacked qualified personnel to provide effective services. The responses in Table 5.8.1 reveal that overall 74.4% of the participants strongly agreed (139; 41.9%) and agreed 108; (32.5%) that there was a lack of qualified library personnel in the libraries. This opinion is also reflected in a mean score of 3.9 and standard deviation of 1.28 in the table. Based on the data from the table, it can be observed that only 16.8% of the participants strongly disagreed (25; 7.5%) and disagreed (31; 9.3%) that qualified library personnel were lacking, while 29 (8.7%) participants were undecided.

In terms of infrastructure, the library users were of the opinion that there was a lack of basic infrastructural facilities in rural communities. Their responses from Table 5.8.1 show that the majority, 75.9% of them strongly agreed (137; 41.3%) and agreed (115; 34.6%) that there was such a challenge. This is also reflected in a mean score of 3.9 and standard deviation of 1.31. From what is recorded in Table 5.8.1, it can be seen that only 13.5% of the participants strongly disagreed (21; 6.3%) and disagreed (24; 7.2%) that basic infrastructural facilities were lacking in rural communities, while 35 (10.5%) participants involved in the study remained undecided.In the opinion of the library users, there were poor telecommunication services in the rural areas. This fact was reiterated by 77.5% of the participants who strongly agreed (129; 38.9%) and agreed (128; 38.6%) that telecommunication services were poor in the rural areas. This is also seen at a mean score of 4.0 and the standard deviation 1.18 in Table 5.8.1. Only 15% of the participants strongly disagreed (30; 9%) and disagreed (25; 7.5%) that there was such a challenge, while 25 (7.5%) participants remained undecided.

The least pressing challenge in the hierarchy as identified by the rural library users was economic constraints. The data recorded in Table 5.8.1 confirm that 59.6% of the participants strongly agreed (94; 28.3%) and agreed (104; 31.3%) that rural dwellers were faced with abject poverty. This fact is also reflected in an average mean score of 3.3 and a standard deviation of 1.59 in the table. Only 12.6% of the participants strongly disagreed (25; 7.5%) and disagreed (17; 5.1%) with this fact, while 92 (27.7%) participants involved in the study chose to be undecided.

This indicated that there are significant differences between the agreed opinions and disagreed opinions of the participants regarding these challenges. The mean scores and standard deviations across the listed items in the table confirmed that there is a consensus agreement between the opinions of the participants. It indicated that the number of participants who agreed with the listed opinions were higher than those who disagreed.

These findings revealed that rural dwellers faced a lot of challenges in seeking and using information from public libraries in the area under study. These challenges were responsible for the lack of patronage of the library services by the majority of rural dwellers particularly the illiterates. In fact, this reflected the reason why the services were mostly patronized by educated people. In this regard, the opinions of the library users on how the identified challenges could be addressed were assessed and are presented in Table 5.8.2 below.

Table 5.8.2: Responses of the library users on how the challenges faced by them in seeking and using information from public libraries could be addressed (N=332)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Ways to address challenges faced by the library users in seeking and using information from public libraries	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Provision of adequate and relevant information resources and services	200	60.2	95	28.6	8	2.4	19	5.7	10	3.0	4.4	0.99
Establishing information resource centers in the rural communities	163	49.1	120	36.1	29	8.7	11	3.3	9	2.7	4.3	0.94
Provision of adult literacy programme for the illiterate people	152	45.8	135	40.7	9	2.7	26	7.8	10	3.0	4.2	1.02
Provision of translation	141	42.5	111	33.4	25	7.5	40	12.0	15	4.5	4.0	1.18

service											
Provision of information repackaging service	141	42.5	124	37.3	12	3.6	35	10.5	20	6.0	4.0	1.20
Marketing and publicity of library services to rural dwellers	165	49.7	115	34.6	12	3.6	11	3.3	29	8.7	4.1	1.20
Provision of training and retraining opportunities to library staff	154	46.4	120	36.1	12	3.6	19	5.7	27	8.1	4.1	1.21
Provision of basic infrastructural facilities in rural communities	155	46.7	142	42.8	10	3.0	9	2.7	16	4.8	4.2	0.99
Others (unspecified)	14	4.2	8	2.4	1	0.3	2	0.6	307	92.5	1.3	0.92

Table 5.8.2 above shows that the provision of adequate and relevant information sources and services in public libraries was rated the highest in terms of the ways of addressing the challenges faced by rural dwellers in seeking and using information from public libraries. This is reflected in the highest mean score of 4.4 and a standard deviation of 0.99 in the table. The responses from Table 5.8.2 confirm that overall 88.8% of the library users involved in this study strongly agreed (200; 60.2%) and agreed (95; 28.6%) that provision of adequate and relevant information sources and services would enable rural dwellers to have easy access to relevant information from the libraries. It is also obvious from the responses recorded in the table that only 8.1% of the participants strongly disagreed (8; 2.4%) and disagreed (19; 5.7%) with the suggested solution, while 10 (3.0%) participants involved in the study did not hesitate to remain undecided.

The library users further submitted that the establishment of Community Information Resource Centres in the rural communities would enable the rural dwellers in question to seek and use information from public libraries with ease. The responses from Table 5.8.2 show that overall 85.2% of the participants strongly agreed (163; 49.1%) and agreed (120; 36.1%) that the establishment of such centers in rural communities would be helpful in addressing their challenges. This fact is also reflected in a mean score of 4.3 and a standard deviation of 0.94 in Table 5.8.2. Only 12% of the participants strongly disagreed (29; 8.7%) and disagreed (11; 3.3%) that the establishment of such centers was desirable, while nine (2.7%) participants remained undecided.

 The perception of the library users involved in this study demanded that basic infrastructural facilities should be provided in rural communities with a view to ameliorating some of the challenges they faced in seeking and using information from public libraries. This is indicated

by 89.5% of the participants who strongly agreed (155; 46.7%) and agreed (142; 42.8%) that such facilities were essential for accessing information from public libraries. This fact is also reflected in a mean score of 4.2 and standard deviation of 0.99. Based on the recorded data in Table 5.8.2, it can be observed that only 7.5% of the participants strongly disagreed (10; 2.7%) and disagreed (16; 4.8%) that such infrastructural facilities are needed, while 16 (4.8%) participants chose to remain undecided. Provision of adult literacy programmes to rural dwellers would also help in addressing some of their challenges in seeking and using information from public libraries. This opinion was expressed by 86.5% of the participants who strongly agreed (152; 45.8%) and agreed (135; 40.7%) that the provision of such programmes could address the challenges of high illiteracy rates among rural dwellers. This fact is also reflected in a mean score of 4.2 and a standard deviation of 1.02. The data recorded in Table 5.8.2 reveals that only 10.5% of the participants strongly disagreed (9; 2.7%) and disagreed (26; 7.8%) that such programme could be helpful, while 10 (3.0%) participants remained undecided.

Furthermore, in the opinion of the library users, marketing and publicity of the library services to rural dwellers would enable rural dwellers to be aware of the existence of library services provided. This fact has been acknowledged by 84.3% of the participants who strongly agreed (165; 49.7%) and agreed (115; 34.6%) that there was a need for marketing and publicity of the library services to rural dwellers. This fact is also reflected in a mean score of 4.1 and a lower standard deviation of 1.20 in Table 5.8.2. Based on the responses recorded in the table, it can be seen that only 6.9% of the participants strongly disagreed (12; 3.6%) and disagreed (11; 3.3%) with such suggestion, while 29 (8.7%) participants involved in the study remained undecided. The issue of training and retraining opportunities for library staff was another way of addressing the challenges faced by rural dwellers in seeking and using information from public libraries as suggested by the library users. This suggestion was offered by 82.5% of the participants who strongly agreed (154; 46.4%) and agreed (20; 36.1%) that it would help in addressing some of their challenges. This opinion is also reflected in a mean score of 4.1 and standard deviation of 1.21 in Table 5.8.2. From the data recorded in the table, only 9.3% of the participants strongly disagreed (12; 3.6%) and disagreed (19; 5.7%) with the suggestion, while 27 (8.1%) participants involved in the study were undecided.

The library users as rural dwellers were also of the view that the provision of information repacking would be helpful in addressing the challenges they faced in seeking and using information from public libraries. The responses from Table 5.8.2 reveal that overall 79.8% of the participants involved in this study strongly agreed (141; 42.5%) and agreed (124; 37.3%) with the suggestion offered. This is also reflected in a mean score of 4.0 and relatively standard deviation of 1.20 in the table. Only 14.1% of the participants strongly disagreed (12; 3.6%) and disagreed (35; 10.5%) with the suggestion offered, while 20 (6.0%) participants were undecided. Likewise, the perception of the library users also indicates that translation services should be provided in the libraries to address some of the challenges they faced in seeking and using information from public libraries. The data recorded in Table 5.8.2 indicates that 75.9% of the participants strongly agreed (141; 42.5%) and agreed (111; 33.4%) there was a need for such services to address issues relating to illiteracy and language barriers among rural dwellers. This perception is also reflected in a mean score of 4.0 and a standard deviation 1.18 as shown in the table. Only 19.5% of the participants strongly disagreed (25; 7.5%) and disagreed (40; 12.0%) with the suggestion offered, while 15 (4.5%) participants remained undecided.

The challenges faced by rural dwellers in seeking and using information from public libraries in the entire rural areas are in tandem with the challenges associated with the provision of public library services in rural areas expressed by the heads of the branch libraries and most of the directors (4; 80%) of the state library boards interviewed. Table 5.8.3 below shows the responses of the heads of branch libraries on the challenges associated with the provision of public library services in the rural areas.

Table 5.8.3: Responses of the heads of branch libraries on the challenges associated with the provision of public library services in rural areas (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Challenges associated with the provision public library services in rural areas	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Poor funding of the libraries	31	60.8	16	31.4	1	2.0	2	3.9	1	2.0	4.5	0.88
Inadequate information resources	20	39.2	25	49.0	3	5.9	3	5.9	-	-	4.2	0.81
Absence of community information resource centers in rural communities	20	39.2	25	49.0	2	3.9	3	5.9	1	2.0	4.2	0.91

	SA	%	A	%	U	%	D	%	SD	%	Mean	SD
High illiteracy rate among the rural dwellers	20	39.2	14	27.5	7	13.7	8	15.7	2	3.9	3.8	1.23
Inadequate library facilities	25	49.0	23	45.1	2	3.9	1	2.0	-	-	4.4	0.67
Dilapidated library buildings	24	47.1	19	37.3	2	3.9	4	7.8	2	3.9	4.2	1.08
Inadequate trained manpower	23	45.1	20	39.2	-	-	6	11.8	2	3.9	4.1	1.14
Inadequate staff training and retraining opportunities	21	41.2	14	27.5	4	7.8	9	17.6	3	5.9	3.8	1.31
Lack of basic infrastructural facilities in most of the rural communities	20	39.2	20	39.2	3	5.9	7	13.7	1	2.0	4.0	1.10
Lack of patronage of the library services by the rural dwellers	19	37.3	12	23.5	6	11.8	14	27.5	-	-	3.7	1.24
Lack of awareness of library services among the rural dwellers	17	33.3	17	33.3	5	9.8	12	23.5	-	-	3.8	1.16
Language barrier	17	33.3	12	23.5	8	15.7	11	21.6	3	5.9	3.6	1.32
Others (unspecified)	-	-	1	2.0	-	-	-	-	50	98.0	1.1	0.42

Table 5.8.3 above shows that the most outstanding challenges associated with the provision of public library services in rural areas revolved around poor funding of the libraries, inadequately trained staff as well as problem of high illiteracy levels among rural dwellers. In the case of funding of the libraries, overall 92.2% of the heads of branch libraries strongly agreed (31; 60.8%) and agreed (16; 31.4%) that the funding of the libraries was inadequate to provide effective public library services in the rural areas. This is reflected in a mean score of 4.5 and a standard deviation of 0.88 in Table 5.8.3. From the data recorded in the table, it reveals that only 5.9% of the participants strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) that there was poor funding of the libraries, while only one (2.0%) participant chose to remain undecided. In the case of library facilities which are largely dependent on funding, 94.1% of the heads of branch libraries strongly agreed (25; 49.0%) and agreed (23; 45.1%) that they were also inadequate. The mean score and standard deviationfor the item are 4.4 and 0.67 respectively as shown in Table 5.8.3. The data reveals that only 5.9% in total of the participants strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) that there was inadequate facilities in the libraries, while none of the participants was undecided.

Similarly, it has been acknowledged by the heads of branch libraries that there were inadequate information resources in the libraries. This fact is also reflected in a mean score of 4.2 and a standard deviation of 0.81 in Table 5.8.3. The responses from the table show that 88.2% of the participants strongly agreed (20; 39.2%) and agreed (25; 49.0%) that there was gross inadequate information resources in the libraries under study. Based on what is recorded in the table, it clearly indicates that only 11.8% of the participants strongly

disagreed (3; 5.9%) and disagreed (3; 5.9%) that there was this challenge, while none of the participants was undecided. Likewise, it has been acknowledged by the heads of branch libraries that there was absence of Community Information Resource Centers in rural communities. This challenge was indicated by overall 88.2% of the heads of branch libraries who strongly agreed (20; 39.2%) and agreed (25; 49.0%) that such centers were lacking in the rural communities. This opinion is also reflected in a mean score of 4.2 and a standard deviation of 0.91. The data also reveals that only 9.8% of the participants strongly disagreed (2; 3.9%) and disagreed (3; 5.9%) that such centers were lacking, while only one (2.0%) participant remained undecided.

According to the heads of branch libraries, most of the buildings of the libraries under study were dilapidated. This opinion was indicated by 84.4% in total participants who strongly agreed (24; 47.1%) and agreed (19; 37.3%) that the library buildings needed renovations. This is also reflected in a mean score of 4.2 and a standard deviation of 1.08 in Table 5.8.3. The responses from the table indicate that only 11.7% of the participants strongly disagreed (2; 3.9%) and disagreed (4; 7.8%) that there were dilapidated library buildings in the area under study, while two (3.9%) participants chose to be undecided.

Next in the hierarchy was a challenge of inadequately trained manpower acknowledged by the heads of branch libraries. This is indicated with a mean score of 4.1 and a standard deviation of 1.14 in Table 5.8.3. The responses from the table reveal that 84.3% of the participants strongly agreed (23; 45.1%) and agreed (20; 39.2%) that this challenge hampered the provision of effective public library services in rural areas.Based on the responses from the table, it can be observed that only six (11.8%) participants disagreed that the libraries were facing a challenge of inadequate trained manpower, while two (3.9%) participants remained undecided. Likewise, the perception of the heads of branch libraries indicates that there was lack of basic infrastructural facilities in most of the rural communities. This opinion is reflected in a mean score of 4.0 and a standard deviation of 1.10.The data recorded in Table 5.8.3 reveals that overall 78.4% of the participants strongly agreed (20; 39.2%) and agreed (20; 39.2%) that there was this challenge which adversely affected the provision of public library services in the rural areas. Based on the data recorded in the table, it indicates that only 19.6% of the participants strongly disagreed (3; 5.9%) and disagreed (7; 13.7%) that basic infrastructural facilities were lacking in the rural areas, while only one (2.0%) participant was undecided.

Among the less severe challenges acknowledged by the heads of branch libraries was high illiteracy rates among the rural dwellers. This opinion is indicated in a mean score of 3.8 and a standard deviation 1.23 in Table 5.8.3. The data recorded in the table reveals that 66.7% in total of the participants strongly agreed (20; 39.2%) and agreed (14; 27.5%) that there was high illiteracy rates among rural dwellers. Based on the responses from the table, it indicates that only 29.4% of the participants strongly disagreed (7; 13.7%) and disagreed (8; 15.7%) that there was such a challenge, while two (3.9%) participants remained undecided. The issue ofinadequate staff training and retraining opportunities was an acknowledged challenge by the heads of branch libraries. This is reflected in a mean score of 3.8 and a standard deviation 1.31 in Table 5.8.3. The data from the table reveals that 68.7% in total of the participants strongly agreed (21; 41.2%) and agreed (14; 27.5%) that staff training and retraining opportunities were grossly inadequate.Based on the recorded data from the table, it indicates that only 25.4% of the participants strongly disagreed (4; 7.8%) and disagreed (9; 17.6%) that there was this challenge, while three (5.9%) participants were undecided. Similarly, the perceptions of the heads of branch libraries revealed that there was lack of awareness of library servicesamong most of the rural dwellers. This is reflected in a mean score of 3.8 and a standard deviation of 1.16. From the recorded data in Table 5.8.3, it shows that 66.6% of the participants strongly agreed (17; 33.3%) and agreed (17; 33.3%) that the majority of rural dwellers were unaware of the services provided by the libraries. The data in the table reveals that only 33.3% in total of the participants strongly disagreed (5; 9.8%) and disagreed (12; 23.5%) that there was such a challenge, while none of the participants was undecided.

Furthermore, the next challenge in the hierarchy as indicated by the heads of branch libraries was lack of patronage of the library services by most of the rural dwellers. This opinion is reflected in a mean score of 3.7 and a standard deviation of 1.24. The responses from Table 5.8.3 reveal that 60.8% of the participants strongly agreed (19; 37.3%) and agreed (12; 23.5%) that the library services were not patronized by most of the rural dwellers in the area under study. The data indicates that only 39.3% of the participants strongly disagreed (6; 11.8%) and disagreed (14; 27.5%) that there was such a challenge, while none of the participants was undecided. The least challenge as rated by the heads of branch libraries was language barrierswhich was associated with the high levels of illiteracy among the populace. This is reflected in a mean score of 3.6 and a standard deviation of 1.32. The responses from Table 5.8.3 show that overall 55.8% of the participants strongly agreed (17; 33.3%) and agreed (12; 23.5%) that there was a challenge of language barrier due to high levels of

illiteracy among the rural dwellers. The table shows that only 37.3% of the participants strongly disagreed (8; 15.7%) and disagreed (11; 21.6%) that language barrier among rural dwellers was a challenge associated with the provision of public library services in the rural areas, while three (5.9%) participants remained undecided.

Results from the interviews indicated that most of the directors (4; 80%) were in agreement with the opinions of the heads of the branch libraries regarding the challenges associated withthe provision of public library services in rural areas. The findings revealed that the issue of poor funding of the libraries was a common complaint among the directors (4; 80%). The only exception was one state, where the director was of the view that the Governor of the state was providing adequate and necessary funds for the library services. However, the same Director acknowledged that more adequate staffing, library facilities like vehicles and ICTs were needed to provide effective public library services inthe rural areas.

In fact, poor funding of public libraries according to the directors had been the fundamental cause of all other challenges that adversely affected the provision of public library services in the rural areas. For example, one of the participants noted:

> …of course like you know everything relies on funding, so there is poor funding, that is one, and sometimes you find that budget has been prepared by the library board for the extension of information to the rural areas, but unfortunately, the budget will not be released, you prepare budget but it is not released, most of the times you find that it is only the personnel costs, that is, the staff salaries that are released, but all other capital projects and all other things that affect the rural areas are not released…..

In addition, some of the directors (3; 60%) interviewed confirmed that although the majority of these libraries were in their permanent buildings, a number of them were occupying converted buildings either donated or rented. From observation during a site visit, one of the libraries under study was found to be sharing a property with another federal government agency. In other words, the library was occupying one portion of the rented property not even the entire property. The whole library collection and the reading area with the furniture were assembled in one room (parking space). A few tables were used to assemble the library books in place of book shelves.

In a similar vein, one of the directors (1; 20%) interviewed revealed that in his state even the state headquarters of the library board was occupying a converted property as the proto-type library building was yet to be completed. The director stated that:

> …let me start with the headquarters, what you see here was a cinema house before now, it was called worldwide cinema, this structure was a converted building of course, that is from cinema to library, and the one at … (the other branch library), I think was a reading room, you know, there used to be a reading room before now, so the reading room was also converted to library, there were some books in that place, we only added some and we made it a library, a branch library.

From observation, there were a number of dilapidated library buildings in the area under study which need urgent attention by the authorities concerned. For example, Figures 5.8.3.3 and 5.8.3.4 below show the deplorable condition of one of the existing and functional branch libraries in the area under study.

Figure 5.8.3.3: A dilapidated public library building

Figure 5.8.3.4: The inner roofing of Figure 5.8.3.3

From Figure 5.8.3.3 and Figure 5.8.3.4 above, it was observed that this library was in bad shape and the roofing of the library was about to collapse. The director confirmed that:

> …Yes, most of the buildings are dilapidated the roofing are leaking, the windows are broken, in fact if you see one of the libraries, especially that of … you will never think anybody can go in and read. So the library buildings need urgent renovation and repairs…

Although the renovations of some of these libraries in question were in progress in some states, some two (40%) directors when interviewed indicated that they had a number of dilapidated library buildings in their branches. Another director confirmed:

> We have five branches that are under us, all the 5 branches were established when the state was created, that was 1991, since then even a window has not been changed, even the paint there has faded away and it has not been changed, even the ceilings have sucked, they have all sacked down, because they have not been repaired…

However, a few branch libraries were in good shape having rich collections attracting users with various information needs. For example, Figure 5.8.3.5 below shows one of

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the newly renovated libraries. Figure 5.8.3.6 also shows another branch library with users busy doing various information-seeking activities.

Figure 5.8.3.5: A newly renovated branch library in the area under study
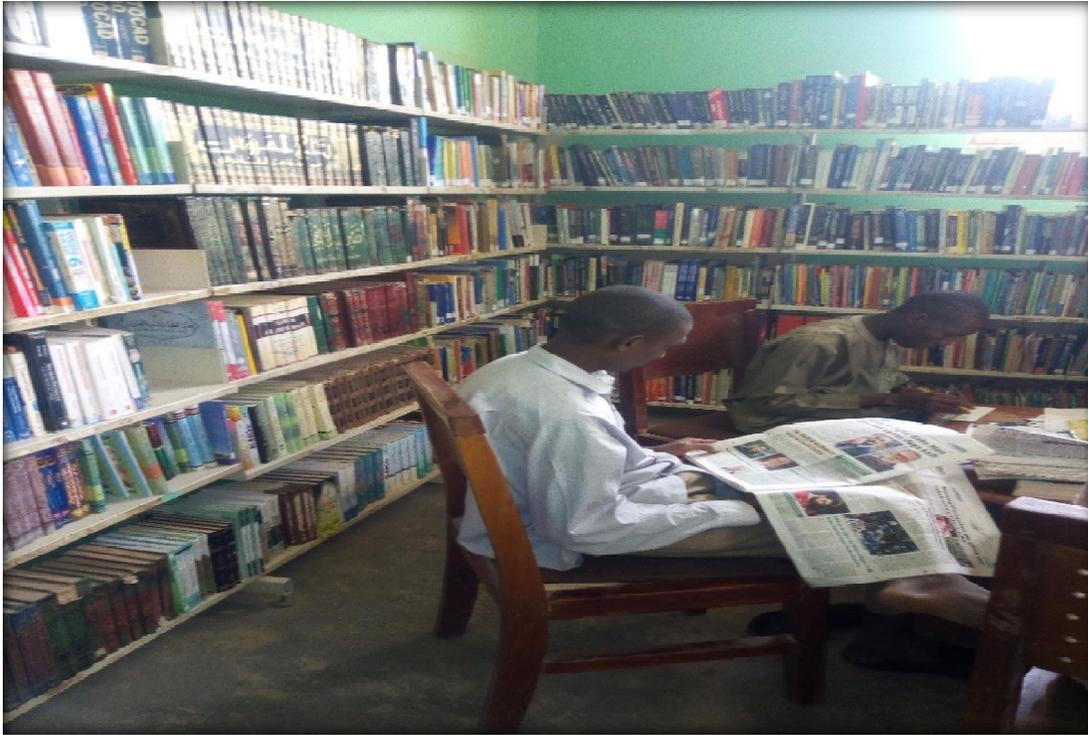
Figure 5.8.3.6: Some library users in their information-seeking activities

The pictures in Figures 5.8.3.5 and 5.8.3.6 above show that some of the branch libraries were in good shape thereby creating a good atmosphere for information seeking activities for the library users. However, from observation such libraries were few and far between in the area under study, as the majority were battling with a number of challenges.

Another challenge associated with the provision of public library services in the rural areas in the area under study was the issue of trained staff. In this regard, all the directors (5; 100%) interviewed indicated that there was a shortage of qualified library personnel to provide effective library services in the rural areas. This included the issue of training and re-training opportunities for the existing staff which was a serious constraint in the libraries across the zone under study as acknowledged by most of the directors (4; 80%) interviewed. The only exception was in one state, where the director acknowledged that the library staffs were encouraged to go for training. The participant noted:

> …for us here, we encourage our staff, we have a library training school that trains library assistants and assistant library officers (Certificate courses). Apart from that each year we sent our staff to read courses in Polytechnics and Universities to acquire more knowledge. Just two of our staffs have

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come back from Ahmadu Bello University, who read Diploma in Library
Science, and we are hoping by next year two or three more will gain
admission. Yes, we encourage that, in fact it is one of our policies that is
manpower development and training.

From document analysis of staff lists during site visits, the existing professional librarians
(staff who possessed the minimum of a Bachelor's degree) working in these libraries, were
far from being adequate. The majority of the branch libraries in the area under study were
headed by para-professional staff (staff that possessed less than a Bachelor's degree). This
has been a serious challenge as the majority of the libraries could not meet the LRCN (2015)
minimum standards and guidelines for public libraries in Nigeria in terms of staffing (see
Table 5.3.4).

With regards to literacy, all the directors (5; 100%) interviewed noted that there were high
levels of illiteracy among rural dwellers in the area under study. In fact, this was another
challenge that adversely affected the patronage of the library services by the illiterate rural
dwellers who were the majority in rural society. Other challenges acknowledged by the
directors were absence of Community Information Resource Centers in rural communities
coupled with inadequate infrastructural facilities in most of the rural areas and to some extent
poor reading habits among the populace.

It is discernible from the foregoing therefore that the majority of these libraries lacked written
policies to guide issues relating to collection development (such as selection, acquisition and
weeding), building structures and the kinds of information sources and services to be
provided in terms of formats and languages for illiterate rural dwellers.

From general observations, public libraries in the area under study were bedevilled with a
number of challenges that require the attention of the authorities concerned. Unless these
challenges are addressed, the libraries cannot provide effective information services that can
meet the information needs of the rural dwellers in the area under study. In this regard, the
opinions of the heads of the branch libraries were solicited on how the identified challenges
could be addressed. These responses along with mean scores are presented in Table 5.8.5.

Table 5.8.4: Responses of the heads of branch libraries on how the challenges associated with provision of public library services in the rural areas could be addressed (N=51)

SA= Strongly agree; A= Agree; D= Disagree; SD= Strongly disagree; UD= Undecided;

STD= Standard deviation

Ways to address the challenges associated with the provisions of the public library services in the rural areas	SA		A		D		SD		UD		Mean	STD
	F	%	F	%	F	%	F	%	F	%		
Adequate funding of the library by government and NGOs	41	80.4	6	11.8	2	3.9	1	2.0	1	2.0	4.7	0.82
Provision of adequate and current information resources and relevant services	33	64.7	15	29.4	2	3.9	1	2.0	-	-	4.6	0.67
Establishing information resource centers in the rural communities	29	56.9	17	33.3	2	3.9	2	3.9	1	2.0	4.4	0.90
Provision of adult literacy programmes for illiterate rural dwellers	28	54.9	20	39.2	1	2.0	1	2.0	1	2.0	4.4	0.81
Provision of adequate library facilities	38	74.5	9	17.6	2	3.9	2	3.9	-	-	4.6	0.75
Provision of basic infrastructural facilities in rural communities	27	52.9	18	35.3	2	3.9	2	3.9	2	3.9	4.3	1.01
Marketing and publicity of library services to rural dwellers	32	62.7	9	17.6	4	7.9	4	7.9	2	3.9	4.3	1.15
Provision of training and retraining opportunities to library staff	37	72.5	9	17.6	2	3.9	1	2.0	2	3.9	4.5	0.97
Information repackaging	31	60.8	13	25.5	3	5.9	3	5.9	1	2.0	4.4	0.98
Provision of translation services	30	58.8	13	25.5	2	3.9	3	5.9	3	5.9	4.3	1.16
Other solutions(provision of good library policies and renovation of the libraries)	2	3.9	-	-	-	-	-	-	49	96.1	1.2	0.78

The suggested solutions for addressing the challenges identified as shown in Table 5.8.5above were centered on the provision of adequate funding to public libraries by government and NGOs. The heads of branch libraries were of the view that the suggested solutions could help in ameliorating the inadequacies faced by the libraries. In the first item of the table for example, the heads of branch libraries were of the view that adequate of the libraries by government and NGOs could help in reducing the inadequacies in the provision of effective public library services in the rural areas. In other words, the funding would help in the provision of adequate and current information resources as well as relevant services that can meet the information needs of the rural dwellers.

The data from Table 5.8.5 shows that overall 92.2% of the participants strongly agreed (41; 80.4%) and agreed (6; 11.8%) that adequate funding of the libraries by government and NGOs would address most of the challenges faced by the libraries. This is reflected in a mean score of 4.7 and standard deviation of 0.82. The table shows that only 5.9% of the participants strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) that there was a need for adequate funding of the libraries, while only one (2.0%) participant was undecided.

Similarly, provision of adequate library facilities was rated second with relatively high mean score of 4.6 and standard deviation of 0.75 in Table 5.8.5. The data from the table reveals that 92.1% in total of the participants strongly agreed (38; 74.5%) and agreed (9; 17.6%) that the provision of these facilities would address a number of challenges facing the libraries. It also shows that only 7.8% of the participants strongly disagreed (2; 3.9%) and disagreed (2; 3.9%) on the listed item, while none of the participants was undecided. Similarly, the heads of branch libraries were of the opinion that provision of adequate and current information resources would be helpful in overcoming the libraries' challenges. The responses from Table 5.8.5 show that more than 94.1% of the participants strongly agreed (33; 64.7%) and agreed (15; 29.4%) the suggestion would be helpful. This opinion is reflected in a mean score of 4.6 and a standard deviation of 0.67 in the table. Based on the recorded data in the table, it clearly shows that 5.9% of the participants strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) with the suggested solution, while none of the participants was undecided.

Furthermore, 90.1% in total of the heads of branch libraries strongly agreed (37; 72.5%) and agreed (9; 17.6%) that provision of training and retraining opportunities to library staff was required to address some of the challenges the libraries faced in providing services in the rural areas. This opinion is also indicated in a mean score of 4.4 and a standard deviation of 0.81 inTable 5.8.5. The data recorded in the table also reveals that only 5.9% of the participants strongly disagreed (2; 3.9%) and disagreed (1; 2.0%) with the suggestion offered, while two (3.9%) of the participants remained undecided. Another solutionoffered by the heads of branch libraries in addressing the challenges associated with provision of public library services in the rural areas was establishment of Community Information Resource Centers in rural communities. This opinion is reflected in a mean score of 4.4 and a standard deviation of 0.90. The data recorded in Table 5.8.5 shows that 90.2% of the participants strongly agreed (29; 56.9%) and agreed (17; 33.3%) that the establishment of such center in rural communities would ease the extension of public library services in those

communities.Based on the responses in the table, it can be seen that only 7.8% of the participants strongly disagreed (2; 3.9%) and disagreed (2; 3.9%) with the suggestion offered, while only one (2.0%) participant remained undecided.

Similarly, provision of adult literacy programmes by public libraries in rural areas would also be helpful in addressing some of challenges faced by the libraries. This opinion was indicated by 94.1% of the participants who strongly agreed (28; 54.9%) and agreed (20; 39.2%) that the provision of such a programme would help in addressing the issue of high illiteracy rates among the rural dwellers. This is also reflected in a mean score of 4.4 and standard deviation of 0.81 in Table 5.8.5. The data in the table also reveals that only four percent of the participants strongly disagreed (1; 2.0%) and disagreed (1; 2.0%) that provision of adult literacy programme could help in addressing some of the challenges the libraries faced, while only one (2.0%) participant was undecided. The heads of branch libraries also believed that information repackaging was needed to address some of their challenges in the provision of public library services in the areas. The data recorded in Table 5.8.5 reveals that overall 86.3% of the participants strongly agreed (31; 60.8%) and agreed (13; 25.5%) that the suggested solution would enable the libraries address some of the challenges they faced. This opinion is also reflected in a mean score of 4.4 and a standard deviation of 0.98. Based on the responses from Table 5.8.5, it indicates that only 11.8% of the participants strongly disagreed (3; 5.9%) and disagreed (3; 5.9%) that information repacking could help in addressing some of the challenges faced by the libraries, while only one (2.0%) participant was undecided.

Another solution proffered by the heads of branch libraries was provision of basic infrastructural facilities in rural communities. The responses from Table 5.8.5 above show that 88.2% in total of the participants strongly agreed (27; 52.9%) and agreed (18; 35.3%) the suggested solution would facilitate the provision of the library services in the rural areas. This is also reflected in a mean score of 4.3 and a standard deviation of 1.01 in the table. From the data recorded in the table, it shows that only 7.8% of the participants strongly disagreed (2; 3.9%) and disagreed (2; 3.9%) that the suggested solution would facilitate the provision of public library services in the rural areas, while only two (3.9%) participants remained undecided. Likewise, from the responses of the heads of branch libraries, it indicates that provision of translation services could help to overcome some of the challenges associated with the provision of public library services in the rural areas. The responses from Table 5.8.5

reveal that more than 84.3% of the participants strongly agreed (30; 58.8%) and agreed (13; 25.5%) that the suggested solution could help in addressing issues associated with illiteracy and language barrier. This opinion is also seen at a mean score of 4.3 and a standard deviation of 1.16 in Table 5.8.5. The data in the table also indicates that only 9.8% in total strongly disagreed (2; 3.9%) and disagreed (3; 5.9%) that translation services were needed to address some of the challenges, while three (5.9%) participants involved in the study remained undecided.

The least solution suggested in the hierarchy was marketing and publicity of library services to rural dwellers which the heads of branch libraries believed would enable rural dwellers to be aware of the existence of public library services. The data recorded in Table 5.8.5 indicates that overall 80.3% of the participants strongly agreed (32; 62.7%) and agreed (9; 17.6%) with the suggestion offered. This opinion is also reflected in a mean score of 4.3 and a standard deviation of 1.15 in the table. The data from the table also shows that only 15.8% of the participants strongly disagreed (4; 7.9%) and disagreed (4; 7.9%) with the suggested solution, while two (3.9%) participants were undecided.

It is noteworthy that these solutions were all associated with improved funding as noted by the directors interviewed. This impliedly shows that without proper funding of the libraries the suggested solutions proffered cannot be executed effectively.

Nonetheless, most of the directors (4; 80%) were in agreement with opinions expressed by the heads of the branch libraries on how the identified challenges could be addressed. However, their emphasis was on the provision of adequate funding to these libraries. They were of the opinion that when adequate funds were provided all other challenges would be overcome. Some of the directors indicated that there was a need for collaboration between the state governments, local governments, and NGOs in funding the libraries. For example, one of the participants noted that:

> Generally, if you want to solve the problems of public libraries there is the need for collaboration between the state government, local governments as well as NGOs, if there is, so we just gather together and partner in order to solve all the challenges, so the main challenge as I have said earlier is just funding, if funds are available all these issues of challenges will solve.

5.9 Summary

This chapter presented the research findings and analysis of the results from the findings. All public libraries in the area under study were established by edicts by the state governments. Based on these laws, issues relating to funding, staffing, provision of information resources, library buildings and other library equipment were the sole responsibility of the respective state governments. The main information needs of rural dwellers in the area under study revolved around agriculture, health, economy, government policies, education, culture and recreation, as well as areas of rural development. The rural dwellers in question used various skills to identify, access and use the relevant information they need. These include visiting public libraries to consult various information sources available. They also identify, access and use information by contacting friends, neighbours, relatives, and other people during market days. Other skills used included receiving information from town criers, on radio, on television, contacts through cell phones, visiting viewing centers and health centers/dispensaries, receiving information from extension workers, gatekeepers, village heads, religious leaders, oral traditional healers, as well as from schools/adult centers.

The major information sources used by rural dwellers to identify, access and use information from the libraries were printed materials (such as books, journals, newspapers and magazines). Other information sources they used included posters and fliers, audio/visuals as well as viewing centers. Based on the research findings, it was revealed that the information services provided by the libraries to the rural dwellers were mainly traditional library services (such as reference services, circulation services, lending services, serial services and children services). Other services provided by the libraries were awareness campaigns on government policies. However, adult literacy programmes, organizing meetings, workshops, seminars, and exhibitions and translation services were not provided by the libraries.

The findings revealed that traditional printed materials such as books and magazines were the most common channels public libraries used to disseminate information to rural dwellers in the area under study. Other channels used were centralized library services at the local government headquarters, audio/visuals, posters and fliers. However, the major challenges faced by these rural dwellers in seeking and using information from public libraries were basically attributed to the centralization of library services at the local government headquarters. This was the most outstanding challenge faced by the rural dwellers as visiting the headquarters at a distance from place of residence had economic implications in terms of

the need for transport because of distances involved. Other challenges were absence of library services in the rural communities, ineffective library services in rural communities, inadequate or inappropriate information resources, absence of community information resource centers in rural areas and poor telecommunication systems, language barriers due to the low literacy level of the majority and unavailability of information in formats that would serve the needs of the illiterate, lack of qualified library personnel, lack of basic infrastructural facilities in most of the rural communities, as well as economic constraints on the part of the rural dwellers.

Finally, the findings revealed that the identified challenges could be addressed by the provision of adequate funds to the libraries by the authorities concerned, provision of adequate, relevant and current information resources, provision of adequate library facilities, provision of training and retraining opportunities to library staff, establishing information resource centers in the rural communities, provision of adult literacy programmes for illiterate rural dwellers, information repackaging, provision of basic infrastructural facilities in rural communities, marketing and publicity of library services to rural dwellers and provision of translation services. Most participants agreed that adequate funding would resolve many of the challenges of inadequate physical infrastructure and information resources and basic services. Discussion of the findings of the current study is provided in Chapter Six.

CHAPTER SIX

DISCUSSION OF THE RESEARCH FINDINGS

6.1 Introduction

This chapter discusses and interprets the research findings presented in Chapter Five of the current study. According to Hess (2004), researchers discuss their research findings with a view to explaining the meaning of the findings pointing out why the findings are important without appearing to be arrogant, condescending or patronizing. Abbas (2015) asserted that discussion and interpretation of research findings are essential in attaching meaning to the research results and they also help in explaining what has been established by the researcher in the course of the study. Thus, the chapter discusses and interprets the research findings in the context of the relevant literature. The current study investigated the provision of public library services to meet the information needs of rural dwellers in North-Western zone of Nigeria.

The chapter is organized around the themes of the research questions and within the key variables of the models used to underpin the study. The discussion of these aspects is preceded by demographic variables of the participants. With regard to the demographic variables of the participants, the chapter discusses their gender, age, highest educational qualification along with the occupations of the library users.

From the research findings, it is clear that the libraries were established by edicts passed, or inherited in some cases, where a state was created from another state. By these edicts, the state library boards with headquarters at the metropolitan cities were expected to have a branch library in every local government area that would cater for the information needs of rural communities within that local government area.

6.2 Demographic variables of the participants

This section discusses the demographic variables of the participants of the study. Demographic information is considered an important aspect of research findings which needs to be examined carefully (Adeleke 2017). The demographic variables discussed include gender, age and highest educational qualification along with the occupations of the library users.

Gender of the participants: This aspect was considered important to be studied because it was assumed to have an impact on the provision and use of public library services to meet the information needs of rural dwellers in relation to the relevant information sources. Public libraries are expected to serve the needs of every individual in the society regardless of his/her gender. Unsurprisingly, the findings revealed that only three (5.9%) of the heads of branch libraries were female. Most of the heads of the branch libraries 48 (94.1%) were male. Similarly, the qualitative findings revealed that four (80%) of the directors were male, but only one (20%) director was a female. The findings were consistent with those of Adeleke (2017) who investigated the extent of automation of public libraries in South-West Nigeria. The results confirmed that there were more male librarians than females. Out of 25 librarians who participated in that study, 16 (64.0 %) were male, while nine (36.0 %) were female.

As regards the users, 238 (71.7%) were male and only 94 (28.3%) were female. This impliedly showed that the provision and utilization of public library services in the rural areas was dominated by males. What these findings confirmed was that gender was a significant factor in the provision and utilization of public library services in the area under study. It has been found that there are religious and cultural restrictions on women in this geo-political zone being a Muslim and Hausa/Fulani dominated area. The fact that the finding showed that there were more males than females in the provision and utilization of public library services in the rural areas; this can basically be attributed to the religious and cultural restrictions on women in this geo-political zone.

The findings agreed with those of Obinyan et al. (2011) in their research on information resources available in branch libraries in Nigeria, who agreed and noted that more than half (144; 60%) of the respondents were male, while 96 (40%) of the respondents were female. Likewise, Emojorho and Ukpebor (2013) in their study on public libraries in Nigeria, found that out of 200 respondents, 122 (61%) were male and 78 (39%) were females.

Similarly, Akinola et al. (2013) in their study on public libraries in Nigeria concurred that there were more males than females among the library users. It indicated that more than half (91; 62.8%) of the respondents were male, while 51 (35.2%) were females. Agodi and Obasi (2016) in their research on the public library in the Nigerian context noted that out of 25 respondents, 14 (56%) were males and only 11 (44%) were females. Likewise, Adeleke (2017) reported that there were more male library users than females. Out of the 214 library users who participated in that study, 134 (62.6) were male, while 80 (37.4) were female.

The findings are also consistent with those of Bopape, Dikotla and Mahlatji (2017) in their research on information needs of the users of public library and information services in South Africa, which reported that the majority of the respondents were male rather than female. According to the results, 120 (57%) respondents were male, while 91(43%) of the respondents were female. For Niskala (2008), unlike for Bopape et al. (2017) who studied community library services in Namibia, 58% of the users were female and 42% of the users were male.

Age of the participants: Age is another aspect which is thought to have an impact on the provision and use of public library services to meet the information needs of rural dwellers. The findings of this study revealed that the heads of branch libraries were mostly above 45 years of age with a few of them below 45. More half (28; 54.9%) of the heads of the branch libraries were above 45. The findings also showed that three (5.9%) of the heads of the branch libraries were between the ages of 25 and 30 years and three (5.9%) were between the ages of 31 and 35 years respectively. Others age ranges were 36-40 years which was indicated by five (9.8%) participants of the group, while some 12 (23.5%) of the participants in this group were between the age of 41-45years. The findings also revealed that all the directors were between the ages of 50 and 56 years.

Based on the findings, it can be seen that age matters in the headship of the branch libraries. The findings of this study showed that the libraries were rarely headed by people younger than 45 years as the headship of the libraries was dominated by people older than 45 years. This has to do with years of experience recorded in service by an employee before he/she could be appointed as head of a branch library. In other words, the criteria used in the appointment of a head of branch library have to do with seniority in the rank and file of the library staff.

For the library users, the majority (115; 34.6%) and (93; 28.0%) were aged between 18-27 years and 28-37 years respectively. The findings indicated that in the other age categories, though relatively few, participants ranged in age from 38-47 years as indicated by 77 (23.2%) participants, while 35 (10.5%) of the participants were between the ages of 48 and 57 years. The library users who were above the age of 57 years formed the smallest group as indicated by 12 (3.6%) respondents. What the findings confirm is that most of the library users were young people. This was owing to the fact that most of the library users were students and civil servants as will be discussed later in the chapter. In fact, the provision of public library

services for children in the rural areas is another area worthy to be recommended for research.

These findings agreed with those of Maepa (2000) in research on the information needs and information-seeking patterns of rural people in South Africa, who noted that a large proportion of the respondents (42.7%) fell within the age group of 18-29 years. Likewise, Tsehay (2014) in research which focussed on health information seeking among rural women in Ethiopia, observed that the larger number of the respondents, 16 (34.8%), fell within the age group of 18-23 years.

As observed by Obinyan, Obinyan and Aidenojie (2011), most of the library users fell within the age ranges of 20-29 and 10 and 19 years as indicated by 56 (23.3%) and 100 (41.7%) of the respondents respectively. This confirmed that most of the library users are young people. Likewise, Emojorho and Ukpebor (2013) who carried out a study with a focus on the effects of public libraries on the attainment of health millennium development goals in Nigeria, noted that out of 200 respondents sampled in the study, 134 (67%) were between the ages of 18-30 years. Similarly, Akinola et al. (2013) confirmed that most of the respondents were within the age range of 18-25 years and 26-35 years, as indicated by 67 (46.2%) and 43 (29.7%) of the respondents respectively.

Bopape et al. (2017) further submitted that the highest number of all the respondents were in the age range of 19-30 years, followed by those in the 31-40 years age group. This indicates that the majority of the library users were between the ages of 19-30 years and 31-40 years as confirmed by 38 (18%) and 113 (53%) of the respondents respectively.

Highest educational qualification of the participants: This aspect of demography is also important in the provision and use of public library services in the rural areas. Education is vital to enable librarians to provide effective and innovative library services that can meet the information needs of their clientele. In fact, qualifications are a factor that determine the expertise or otherwise of an employee in the discharge of his/her official responsibilities. Similarly, educational qualification is crucial among the library users in accessing and using the various information sources available in the libraries. Effective utilisation of public services depends on the educational levels of the library users.

The findings of this study revealed that most (33; 64.7%) of the heads of the branch libraries possessed Diplomas/NCE, followed by those (13; 25.5%) who obtained a certificate which

was the lowest qualification of the group. Those with Degrees/Higher National Diplomas (HND) were only five (9.8%) in number. This showed that the majority of the heads of the branch libraries were Diploma/NCE holders.

Based on the findings, there was a challenge of lack of relevant qualifications such as degrees among the heads of the branch libraries. This lack of a degree among heads of branch libraries was a cause for concern as these figures show under-qualification by this group of participants. As will be seen later in this chapter, the lack of training of library staff was a noted challenge. However, for the directors of the state library boards, the findings also revealed that most, four (80%) of the directors interviewed possessed a Bachelor's degree, and only one (20%) of the directors possessed a Master's degree.

These findings are consistent with those of Salman, Mugwisi and Mostert (2017) in their research on access and use of public libraries in Nigeria, who found that out of the six heads of rural libraries who participated in the study, four (66.7%) were Diploma/NCE holders, while two (33.3%) were Bachelor's degree/HND holders. Similarly, for the directors, the research found that out of six directors involved in the study, three (50%) possessed a Bachelor's degree, while three (50%) also possessed a Master's degree. Onifade and Onifade (2011) who studied staffing patterns of state colleges of education libraries in Nigeria found that there was more para-professional staff than professional librarians across the 20 colleges of education surveyed. The overall results revealed out of 190 respondents who participated in the research, 99 (52.1%) were library officers (para-professionals), while 91 (47.9%) were professional librarians.

In stark contrast to the current study, Adeleke (2017) revealed that 18 (72%) of the librarians who participated in the study possessed Masters' degrees, while six (24%) of the participants were first degree holders. Likewise, Chinwe, Ogbonna and Osuchukwu (2014) in their research which surveyed three library and information centers in Nigeria, found that there were more professional librarians staffing the libraries than non-professionals. The results indicated that of the three heads of the libraries studied, two (66.7%) were professional librarians, while one (33.3%) was a non-professional.

In terms of the library users, the findings of this study revealed that most of the library users involved in the study possessed Diplomas/NCE and Degrees/HND respectively. Specifically, the findings showed that only seven (2.1%) said they had no formal schooling while 22

(6.6%) had only non-formal Islamic education. Those with only primary school education among the library users numbered six (1.8) and 59 (17.8%) had secondary school education. Those with certificate courses numbered 31 (9.3%) while 93 (28.0%) and 108 (32.5%) had Diplomas/NCE and Degrees/HND respectively. Only six (1.8%) of the users had master degrees.

This distribution impliedly showed that most of the participants that patronize public library services in the rural areas would be considered relatively educated while the number of the illiterate people that patronized the library services was negligible. This also impliedly showed that library services were more relevant to the literate rural dwellers than the illiterates. As will be seen later in this chapter, reasons for non-use of the libraries by the majority of illiterate people were literacy levels, language barriers, nature of information resources and services offered by the libraries and their distance from rural communities, lack of knowledge about the existence of libraries and economic factors.

It is noteworthy that the purpose of establishing branch libraries in the local government areas in the area under study was primarily for them to cater for the information needs of rural communities. Therefore, from the findings, the purpose for establishing the libraries was partially defeated. This was because it was estimated that over 70% of people living in the rural areas were illiterates who cannot read or write (Aina 2006). Based on the findings, the majority of this category of rural dwellers did not patronize the library services. This indicates that the libraries were predominantly serving the information needs of the minority of literate people who represented not more than 30% of people in the rural areas.

These findings are consistent with those of Salman et al. (2017) who found that the majority of the library users held Bachelor's degrees, and then followed by Diploma and NCE holders. The results indicated that 109 (30.3%) of the library users possessed Bachelor's degrees, 56 (15.6%) of the library users possessed Diplomas, while 53 (14.7%) possessed NCE. Likewise, Bopape et al. (2017) found that the majority of the library users had Matriculation certificate and a Diploma, followed by those with a Bachelor's degree and secondary education. Their study indicated that 60 (29%) of the library users possessed Matric and a Diploma, while 35 (17%) and 30 (15%) possessed Bachelor's degrees and secondary education respectively.

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In sharp contrast to the findings of the current study, Obiyan, Obiyan and Aidenojie (2011) in their research on the use of information resources in four branches of a state public library in the context of Nigeria, revealed that out of 240 library users participated in the study, 176 (73.3%) were O'level SSCE holders (senior secondary education), 40 (16.7%) were Diploma holders, 18 (7.5%) were Degree holders and only six (2.5%) possessed higher degrees. This indicates that the Diploma and Degree holders that participated in the study were few, unlike in the current study.

Classification of the library users with their respective occupations: The findings of this study revealed that 121 (36.4%) of the library users involved in the study were students, followed by civil servants, in terms of occupation. The findings indicated that 116 (34.9%) of the library users were civil servants. The least represented occupation among the library users were artisans and scholars, namely four (1.2%) and six (1.8%) of the library users respectively. This indicates that the library services were mostly patronized by students and civil servants seeking study space and resources to support school and work respectively. Although most of the library users were students and civil servants, the findings indicated that people from different walks of life patronized the library services.

The opinions of the heads of branch libraries indicated that the classification of the library users comprised people from different walks of life. Based on the findings, civil servants formed the largest category of the library users as indicated by 50 (98%) of heads of branch libraries. Civil servants were followed by the general category of adults and students within the respective communities as the next most group of common library users. This was revealed by 49 (96.1%) heads of the branch libraries; 47 (92.2%) also indicated that children were next in the ranking followed by the general category of literate people (45; 88.2%), Unemployed people (jobless) were also among the library users as indicated by 38 (74.5%) heads of branch libraries. This indicated that the unemployed patronized the library services in search of job vacancies in the dailies. Another reason could be that they might probably patronize the library services for leisure and current affairs with a view to keeping themselves abreast about day-to-day happenings. Others were subsistence farmers (37; 72.1%) as well as housewives along with large scale famers (28; 54.9%).

These findings concurred with those of Niskala (2008) who found that 64.7% of the library users were learners and students. Moodley (2013) carried out research on the information needs and information seeking behaviour of community library users in South Africa. The

study involved four branch libraries which include Northdale, Woodlands, Sobantu and Eastwood in the city of Pietermaritzburg, KwaZulu-Natal province. Based on the findings, most of the respondents from Northdale and Woodlands libraries were employed, while the majority of respondents from Sobantu and Eastwood libraries were unemployed. A large number (42%) of respondents from Eastwood library were students.

The findings of this study are also consistent with those of Nnadozie, Okeke and Onyekweodiri (2015) in their research on user satisfaction in public libraries in Nigeria, which found that the majority (103; 43%) of the respondents were students by occupation. Salman et al. (2017) found that the majority of the library users were students then followed by the unemployed and civil servants. The results indicated that 155 (43.1%) of the respondents were students, then followed by those unemployed (53; 14.7%) and civil servants who constituted 49 (13.6%) of the respondents. The research found that the unemployed and some of the students indicated that they used the library in search of job vacancies.

However, the findings of this study showed that other categories of persons like non-literate people, artisans and people living in terrain areas virtually did not patronize the library services at all as indicated by a very small number of the heads of branch libraries.

6.3 Information needs of rural dwellers in the North-Western zone of Nigeria

In this section the opinions of the heads of branch libraries and library users were solicited with a view to identifying the information needs of rural dwellers.The identification of information needs of rural dwellers is a crucial aspect in the provision of effective public library services in rural areas. According to Wilson's 1981 model of information behaviour, the information-seeking behaviour of an individual arises from the recognition of a need for information in order to satisfy a basic need (Wilson 1981:4). Aina's 2006 model suggests a triangular linkage between farmers, extension agencies and public libraries in the provision of agricultural information to rural farmers. This linkage would be helpful in identifying the information needs of the rural farmers. Information needs are those needs that an individual requires for recreation, leisure or meeting tasks that are considered critical for his/her survival (Olarongbe et al. 2013:3). Ape (2012:22) is of the view that:

> Information need is resulted from the need to acquire new knowledge or facts about something essential in satisfying the conscience of individuals that will enable them to participate fully in societal development.

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Therefore, the current study found that the areas of information needs of rural dwellers in the area under study revolve around:

    i.   Agricultural information needs;

   ii.   Information needs on health-related issues;

  iii.   Information needs on government policies;

  iv.   Information needs on economic related issues;

   v.   Educational information needs;

  vi.   Cultural and recreational information needs; and

 vii.   Information needs on rural development.

Agricultural information needs: In this section, the findings of this study revealed that the majority of rural dwellers in the North-Western zone of Nigeria needed agricultural information on various aspects of agriculture for sustainable rural development. This was owing to the fact that rural communities are farming communities and as such they require information on agriculture more than they need information about any other aspect of life. The heads of branch libraries as well as library users were in agreement about the need for agricultural information. Based on the findings, 96.1% and 88.3% of the heads of branch libraries and library users respectively indicated that rural dwellers needed information on agricultural inputs (such as fertilizer, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals). Such information would no doubt enhance their agricultural production in terms of farming, poultry, bee keeping, fishing and horticulture. Likewise, the findings indicated that information on farm implements (like ploughs, harrows and cultivators) was also needed by the rural dwellers in order to boost their agricultural production as acknowledged by 96.1% and 72.9% of the heads of branch libraries and library users respectively. The results also showed that information on machinery (such as thrashers, winnowers and harvesters) was equally important to rural dwellers as indicated by the majority of the heads of branch libraries (86.3%) and library users (67.5%). Information on this aspect of agriculture would facilitate large scale farming in rural communities.

Similarly, most of the heads of branch libraries (84.4%) and library users (63.6%) were of the opinion that rural dwellers needed information on tractors for large scale farming. From the findings, it was acknowledged by the majority of the heads of branch libraries (82.4%) and library users (65.4%) that information on farming techniques was also imperative to rural dwellers in the area under study. Both the heads of branch libraries (84.3%) and library users

(73.5%) echoed similar sentiments that information on agricultural loans and credits would significantly enable rural dwellers to access loans and other micro finance for boosting their farming activities. Furthermore, most of the heads of branch libraries (78.5%) and library users (56.4%) noted that the rural dwellers in question needed information on agricultural marketing. This would enable rural farmers to market their agricultural products and be fully in the picture about the market prices of products.

These findings are consistent with those of Emmanuel (2012) in research on information needs and information seeking behaviour of rural farmers in Nigeria, who found that the information needs of rural farmers revolved around farm inputs (such as fertilizer, improved variety seeds), loan/credit facilities, marketing strategy and adult literacy. Likewise, Mtega and Ronald (2013) in their study focusing on the state of rural information and communication services in Tanzania, found that the information needs of rural people were centered on agricultural information related to markets, weather, credits, inputs, soil classification, animal and crop husbandry practices, irrigation, agricultural tools, crop varieties, animal breeding and credit facilities among others. Esievo and Adewole (2014) also noted that since rural communities are farming communities, libraries are expected to provide information that can improve farming techniques among the rural farmers.

Information needs on health-related issues: In this section, the findings of this study revealed that rural dwellers in the area under study needed information on infectious diseases (such as HIV/AIDS, TB, hepatitis, malaria, influenza, diarrhea) as confirmed by the heads of branch libraries (88.2%) and library users (75.6%) involved in the study. These diseases are communicable which can be transmitted in various ways from one person to another in a society. It was acknowledged by the majority of the heads of branch libraries (92.1%) and library users (77.4%) that rural dwellers in the area under study required information on maternal and child health care in particular. In addition, 92.1% and 72.9% of the heads of branch libraries and library users respectively submitted that information on routine immunization was desperately needed by rural dwellers in the area under study. This indicated that rural dwellers understand the importance of information on different kinds of vaccinations for eradicating polio, measles and other similar diseases. Most of the heads of branch libraries (76.5%) and library users (68.1%) agreed and noted that information on nutrition to address the issues of hunger and malnutrition was needed by rural dwellers.

Similarly, 72.6% and 61.8% of the heads of branch libraries and library users respectively observed that rural dwellers in the area under study needed information on family planning. The findings of the study also indicated that timely information on disease/epidemic outbreaks was greatly needed by rural dwellers as pointed out by most of the heads of branch libraries (82.4%) and library users (67.8%) who believed this would enable rural dwellers to take all necessary measures and precautions on time. Information on environmental sanitation was also imperative for rural dwellers for a healthy environment. This fact was reported by 82.4% and 62.1% of the heads of branch libraries and library users respectively.

Based on these findings, rural dwellers needed information on a range of health related issues. What these findings confirmed was that rural dwellers understand the important role information plays in ensuring a healthy society. The findings also indicated that rural dwellers knew that there can never be sustainable development without improved health services in rural communities and health issues can be a matter of life and death. Rural inhabitants need information on how to prevent different diseases that could adversely affect them as well as need an awareness of the available health care delivery and what it costs (Igwe et al. 2015:162). This indicated that there were high expectations of public libraries providing information on health related issues. For effective provision of health-related information, public libraries can liaise with the state and federal ministries of health to collect information about various programmes that have to do with health related matters (Momodu 2012:94). Places like Community Health Care Centers can equally be engaged by the libraries for disseminating the needed information to rural dwellers (Momodu 2012:94).

Generally, these findings are consistent with those of Emojorho and Ukpebor (2013) in their study on public libraries in Nigeria. Results from the study showed that more than 80% of the respondents revealed that they needed information on typhoid, maternal and child care, food nutrition and diarrhea. Similarly, 70% of the respondents revealed that they needed information on HIV/AIDS and sexually transmitted diseases, Malaria fever, cancer and headache/migraine. More than 70% of the respondents confirmed that they needed information on hypertension, diabetes, influenza/cold, old age diseases and hepatitis.

A similar study by Ape (2012) which focused on the role of public library services in addressing health information needs of people living with HIV and AIDS (PLWHA) in Nigeria, found that PLWHA have divergent information demands that include information for the treatment of tuberculosis, fever, body itching, and diarrhea among others. Likewise,

Jean (2012) conducted a related study on information behaviour of diabetic patients in the context of USA, and found that the information needs of diabetic patients revolved around diet, exercise, diagnostic tests/procedures, diabetes management, risk factors and diabetes related complication. Concurring, Tsehay (2014) reported that the major factors that motivate rural women to seek such information included perceived personal risks of health complications and their quest to seek a healthy life.

Information needs on government policies: On government policies as areas of information need, the findings of this study revealed that rural dwellers need information on policies regarding governance. This was confirmed by the 90.2% and 70% of the heads of branch libraries and library users respectively. Harande (2009:4) noted that rural dwellers needed information for their political rights that will enable them to exercise such right for sustainable development of their communities. Similarly, information on election and voters' registration was sought and considered to be essential to rural dwellers by both groups. This, according to most of the heads of branch libraries (92.2%) and library users (78.9%), would enable rural dwellers as citizens of the country to exercise their franchise rights as required by the constitution. This would also enable them to elect credible candidates from the grassroots that can ensure sustainable development in their rural communities. Idiegbeyan-Ose and Akpoghome (2009) concurred that the position of information in political participation and voting is paramount that it empowers people in communities politically to have a harmonious relationship with government so that meaningful development can be brought in their communities.

Similarly, the findings of this study revealed that information on the population census was needed by rural dwellers as confirmed by 84.3% and 65.9% of the heads of branch libraries and library users respectively. This information is also vital for socio-economic planning and equitable distribution of resources in the country. It was also acknowledged by the majority of the heads of branch libraries (76.4%) and library users (60.8%) that rural dwellers needed information on afforestation as government policy. This information was considered to be essential to rural dwellers in this part of the country to take measures against desert encroachments particularly when the area is neighboring with Niger Republic from the north and Benin Republic from the west. In a similar vein, information on deforestation as a government policy was also needed by rural dwellers as indicated by the majority of heads of branch libraries (72.6%) and library users (67.2%). In this area government encourages

people to plant trees in its tree planting campaign and discourage people from cutting trees in search of firewood.

Furthermore, the findings of this study showed that 74.5% and 71.1% of the heads of the branch libraries and library users respectively agreed and noted that rural dwellers needed information on skill acquisition as a government policy for self-reliance especially among the youth. Based on the findings, it was indicated by 82.4% and 53.9% of the heads of branch libraries and library users respectively that rural dwellers needed information on government programmes on rural development.

What these findings confirmed was that rural dwellers needed information on government policies on various aspects which are pertinent to the attainment of sustainable rural development. This was as a result of their desire to know what their obligations are and what are due to them as citizens. With this knowledge they would be able to establish their rights and expectations from authorities and contribute to the development of their communities. This indicated that public libraries are expected to cater for the information needs of rural dwellers regarding different government policies in place. In this regard, Momodu (2012:94) suggested that public libraries can collect information on government policies and political situations in the countries from electronic and print media, translate such information into local languages and disseminate same to rural dwellers in an oral form or in a written form.

Information needs on economic related issues: With regards to economic related issues, the findings of this study revealed that rural dwellers needed information on such issues for sustainable development in their communities. Notable among them was information on micro-credit loans and finance as revealed by more than 90% and about 70% of the heads of branch libraries and library users respectively. This finding impliedly showed that micro finance banks should be established in rural areas so that rural dwellers can subscribe to bank loans and other facilities to empower themselves for economic development (Idiegbeyan-Ose and Akpoghome 2009). In this regard, information on cooperative societies and credit facilities are vital in meeting the socio-economic information needs of rural dwellers (Momodu 2012:94).

Based on the findings of this study, information on business/entrepreneurial skills was believed to espouse the economic status of rural dwellers. This view was posited by most of the heads of branch libraries (86.3%) and the library users (73.8%), who believed that such

information would tremendously boost economic activities of people in rural communities. Idiegbeyan-Ose and Akpoghome (2009) earlier pointed out that rural dwellers need to be empowered with information on what to do, how to do it and when to do it. The provision of such information and introduction of medium and small scale enterprises in rural communities would ensure empowerment in terms of development.

Furthermore, the findings of this study revealed that more than 90% and about 70% of the heads of the branch libraries and library users respectively, confirmed that rural dwellers in the area under study needed information on youth and women empowerment for economic self-reliance and development. The public libraries empower local economic potential through the provision of necessary information on income generating activities and through the provision of information on goods and services (Agodi and Obasi 2016:56). In a similar vein, it was observed by most of the heads of branch libraries (84.4%) and library users (55.4%) that rural dwellers needed information on employment opportunities. The provision of such information by public libraries in the rural areas could significantly reduce the rate of unemployment among youth in rural communities.

What these findings confirm is that rural dwellers attached economic importance to information for sustainable rural development. The findings indicate that information on economic activities is vital to the aspirations of rural dwellers in their quest for sustainable rural development. This is consistent with the findings of Agodi and Obasi (2016) which shows that public libraries have an important role in ensuring economic well-being of people in a society.

Educational information needs: This is another area in which rural dwellers needed information was education at different levels. Based on the research findings, the two groups of participants of the current study indicated that rural dwellers in the area under study needed information about tertiary education, secondary education, universal basic education (UBE), adult education, girl-child education and nomadic education. Information needs relating to tertiary and secondary education were solicited from the heads of branch libraries. Information about UBE, adult, girl-child and nomadic education were solicited from both the heads of branch libraries and library users as rural dwellers. This is because at the grassroots levels (local government levels), the main interests are universal basic education (primary and junior secondary), girl-child education, adult education and nomadic education. At the

state and federal levels, the main concern is secondary education (senior secondary education) and tertiary education, normally found in urban and semi-urban areas.

According to the British Council (2014), the federal government of Nigeria is primarily responsible for the regulation, quality control and policy formation on education at all levels. However, the federal government is directly responsible for education at the tertiary level; states are responsible for secondary education, while local governments are responsible for primary education (British Council 2014). In this regard, the findings of this study showed that more than 90% of the heads of branch libraries confirmed that the rural dwellers needed as much information about tertiary and secondary education as about universal basic education (UBE) for sustainable rural development. This indicated that rural dwellers needed education at tertiary and secondary (senior) levels as needed by their counterparts in urban areas.

For universal basic education, the findings of this study revealed that more than 90% and more than 80% of the heads of branch libraries and library users respectively confirmed that rural dwellers in the area under study needed information on that level of education. In Nigeria, the UBE programme was launched in 2004 by the Federal Government in its efforts to eradicate illiteracy, ignorance and poverty at the grassroots level (Opoh, Okou and Ikang 2015). The policy on this programmes made formal education compulsory, universal and free, from primary up to junior secondary levels. The programme also embraces adult education, nomadic education and non-formal education (Opoh et al. 2015). In addition, UBE was also intended to cover girl-child and women's education and other underserved groups in the society such as the poor, street and working children, rural and remote populations, nomads, migrant workers, indigenous peoples, minorities, refugees, and the disabled (Unagha 2008).

The findings of this study found that information on girl-child education was also needed by rural dwellers as indicated by more than 80% and 70% of the heads of branch libraries and library users respectively. According to Nmadu et al. (2010), in the northern part of Nigeria, studies indicated that there was high gender inequality in education where the majority of young girls were disadvantaged over their boy counterparts. Nmadu et al. (2010) further added that less than half of young people living in northern Nigeria were enrolled in schools. In these enrollments about two third (2/3) were male leaving females reflecting less than one third (1/3). Notable from these statistics as observed by Ifijeh and Osayande (2011) is that an

average parent in a rural area would rather prefer to invest in the education of their sons rather than their daughters. The major barriers deterring parent from enrolling their daughters in schools as identified by the British Council (2014) included distance of the schools from the rural areas, where girls have to walk considerable distance to reach the nearest schools, school fees and gender norms. Other barriers were the cultural and religious ideas that exclude women and girls from decision-making, community participation and control over their own lives.

Concurring, Ifijeh and Osayande (2011) in their study on issues in girl-child education in Nigeria confirmed that socio-cultural patterns, religious misconceptions, poverty, teenage pregnancy and early marriage were among the major factors that hinder girl-child education. In 2003, the UNICEF in collaboration with the Federal Ministry of Education developed a 'Strategy for the Acceleration of Girl's Education in Nigeria' (SAGEN). This was to address the number of out-of-school girls in Nigeria so as to ensure that all girls have access to quality basic education by 2005 particularly in the rural areas (British Council 2014).

For adult education, the findings of this study revealed that the majority of the heads of branch libraries (88.2%) and library users (71.7%) noted that rural dwellers required information about adult education. Udofia (2012) who carried out research on information needs of rural secondary school students in the context of Nigeria, established that the federal government of Nigeria launched the Mass Literacy Campaign in 1992 with a view to drastically reducing illiteracy among the populace.Rural libraries as information centers have been identified as the best option in the provision of adult education in rural areas (Momodu 2012:93). Adult literacy classes were to be introduced to espouse the programmes where the services of retired teachers in the communities could be engaged, coupled with the provision of information materials like books on alphabets, pictures, posters and artefacts for the illiterate rural dwellers (Momodu 2012:94).

Furthermore, the findings of this study indicated that more than 80% and more than 60% of the heads of branch libraries and library users respectively agreed and noted that information about nomadic education was needed by rural dwellers in the area under study. Umar and Tahir (2000) noted that the emergence of nomadic education as part of the formal educational system in Nigeria and many other African countries was as a result of governments' commitment to equalize educational opportunities for all social groups irrespective of their ethnic or geographical origins, gender, or social class. Nomads are described as groups of

people mostly found in rural areas who migrate from one place to another in search of economic means of livelihood (Akpan 2015). In Nigeria, nomadic education was primarily introduced for two migrant groups, namely the nomadic pastoralists and the migrant fishermen (Umar and Tahir 2000).

Generally, what these findings confirmed was that rural dwellers are coming to understand the importance of women education in society. Though the findings indicated that both groups rated the education information needs at different levels of importance, they agreed that the above were the important areas of educational information needs of rural dwellers. This indicated that rural dwellers were aware of the important position of education in human and societal development. The results also showed that the perceptions of the two groups on educational information needs at all levels signified that rural dwellers understood that quality education cannot be ensured in rural communities without effective public library services. As such, public libraries have a key role to play in facilitating educational development in the rural areas by providing effective and innovative services. Agodi and Obasi (2016:56) noted that this role could be done by public libraries through the provision of books and other educational resources relevant to the needs of their users. Igwe et al. (2015:162) highlighted that public libraries should cater for the information needs of the existing rural schools, illiterate and semi-illiterate people.

Research by Akinola et al. (2013) on public libraries in meeting the information needs of post-secondary students in the context of Nigeria, found that the majority of the respondents needed information for academic work. This was indicated by more than half (90; 62.1%) of the respondents. Some 66 (45.5%) of the respondents indicated that they needed information on sports news and recreation. Other information needed by the students were on personal development which attracted 60 (41.4%) respondents, while job-related information attracted 51 (35.2%) respondents, health and research information each was indicated by 48 (33.1%) respondents.

Anyalebechi and Udo-Anyanwu (2016) also found that out of 333 respondents involved in their study, 278 (90%) of the library users indicated their need for information on education, 289 (94%) needed information generally, while some 45 (15%) of the respondents needed information on recreation. The findings also showed that 64 (21%) of the respondents required information on culture, the infrastructural facilities attracted only 31 (10%)

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respondents, while health and social services attracted 135 (44%) and 234 (76%) respondents respectively.

Cultural and recreational information needs: In this section, the findings of this study also revealed that rural dwellers needed information on culture and recreation. The findings indicated that information on cultural festivals was needed by rural dwellers as confirmed by 82.4% and 76.8% of the heads of branch libraries and library users respectively. Based on the findings of this study, it showed that more than 70% and more than 50% of the heads of branch libraries and library users respectively noted that information on tourism was needed by rural dwellers in the area under study. Similarly, the findings indicated that 72.5% and 66.2% of the heads of branch libraries and library users respectively reported that information on documentaries was also required by rural dwellers in the entire zone under study. Likewise, the findings of this study showcased that information on entertainments was highly sought after by rural dwellers in question. This fact was confirmed by more than 70% and more than 50% of the heads of branch libraries and library users respectively.

These findings have indicated that rural dwellers needed information about culture and recreation from public libraries. This confirmed the desire of rural dwellers to maintain their cultural norms and values which are the major identities of any society. From the findings of this study, it showed that public libraries are expected to collect information sources that conveyed and documented the cultural heritage of the rural communities served. Likewise, it showed that public libraries should be at the forefront in the provision of other recreational activities that will keep rural communities socially engaged and developing.

These findings agreed with Momodu (2012:95) who noted that in preserving the culture and tradition of communities, public libraries can tape or film the festivals, dances, songs, customary marriages with commentaries preferably in the local languages of those communities. Idiegbeyan-Ose and Akpoghome (2009:25) remarked that information is a tool that can make a significant impact on cultural development. They pointed out that through information; western culture has been imported into African communities which largely affected the local cultures in both positive and negative ways. For recreational information needs, Momodu (2012:95) further added that public libraries can provide recreational materials such as games, story books, films, organizing plays and drama so as to reflect the past history of the communities which is another way of ensuring relaxation of rural dwellers.

Igwe et al. (2015:162) noted that rural inhabitants need information on religions, recreations and cultural activities.

Information needs on rural development: Rural development is the core factor of national development in any nation. No sensitive government will neglect the development and empowerment of rural communities and expect meaningful national development (Harande 2009:1). Furthermore, Harande (2009:1) is of the opinion that as a matter of policy, information must be seen as a basic resource required for sustainable development.

The findings of this study showed that rural dwellers in the area under study needed information on rural development. In this regard, more than 90% and more than 70% of the heads of branch libraries and library users respectively indicated that rural dwellers need information on modes of transport (such as buses, cars, vans, lorries, motorcycles and bicycles). Likewise, the findings revealed that the majority of heads of branch libraries (86.2%) and library users (71.1%) confirmed that rural dwellers needed information on portable water. Based on the research findings, information on food security was needed by rural dwellers for sustainable rural development. This was indicated by 88.2% and 65.4% of the heads of branch libraries and library users respectively.

The findings also showed that more than 80% and more than 60% of the heads of branch libraries and library users respectively agreed and noted that rural dwellers in the area under study needed information on rural electricity. Information on accessible roads was also needed by rural dwellers in the area under study. This was confirmed by more than 80% and more than 60% of the heads of branch libraries and library users respectively. The findings also showed that more than half (68.6%) of the heads of branch libraries and library users agreed and noted that rural dwellers equally needed information on housing. These findings were consistent with the assertion made by Madu, Yosuf and Suyatno (2015:446) that rural development is the comprehensive path to socio-economic transformation which ensures equitable distribution of resources within the society.

Based on the findings of this study, rural dwellers in the area under study needed information on all spheres of life. Public libraries are expected to provide relevant and effective information resources and services that can meet the information needs of rural dwellers for sustainable rural development.

The findings of this study are consistent with those of Momodu (2002), Mtega and Ronald (2013), Akanda and Roknuzzaman (2013) and Oyovwe-Tinuoye, Omeluzor, and Emeka-Ukwu (2015) which found that the information needs of rural dwellers revolve around topics such as health and sanitation, education, transport, housing, legal issues, agriculture, economy, education, community development, government policies and programmes, religion, politics, social services, employment, occupation, recreation and leisure, literacy primers, child care and care of pregnant women, problems of daily existence such as water supply, electricity and roads, employment and work opportunities.

Generally, the overall results confirmed the literature reviewed in this study (Ape 2012; Emmanuel 2012; Momodu 2012; Udofia 2012; Daudu and Mohammed 2013; Idiegbeyan-ose, et al. 2015; Patience 2015; and Ezema 2016) which found that the information needs of rural communities in Nigeria are generally categorized into health; agriculture; education; housing; employment, transportation, welfare, family, legal information, crime and safety, policies and government, land and human rights, markets, civics, politics, finance (credit), academic, leisure, international news, occupations, farm inputs, adult literacy programmes, social services, and religion. Others include prices of local commodities, water conservation, job vacancies, food and nutrition, national poverty eradication programme, community development, cultural activities, empowerment strategies and technological improvement and transformation.

6.4 Skills used by rural dwellers to identify access and use information from public libraries and other sources

In this section the opinions of the library users were solicited to identify the various skills used by rural dwellers in accessing and using information from public libraries and other information sources. Information access and use are as equally important as the information availability. Information need, information availability, as well as information access, cannot make any sense if the information is not effectively used (Odefadehan, Akinola and Odefadehan 2016:2). According to Wilson's 1981 model of information behaviour, an information seeker engages in information-seeking in order to access and use information to satisfy the basic needs. In this regard, information seeking, information searching and information use are the different stages or process used by an information seeker in solving a particular problem (Wilson 2000:53). Aina's 2006 model suggests a triangular linkage between farmers, extension agencies and public libraries in the provision of agricultural

information to rural farmers. This linkage would serve as a skill through which public libraries could disseminate information to rural dwellers and the rural dwellers could access and use information from the libraries as well.

Therefore, information behaviour is the umbrella term that encompasses the methods that information seekers employ to discover and access information sources (Stokes 2013:33). Onyenachi, Akidi and Onyekweodiri (2015:41) opined that in the context of Nigeria, rural development can only be achieved if rural dwellers have the basic skills to access relevant and diverse information. Likewise, Idiegbeyan-Ose et al. (2015) argued that rural dwellers in Nigeria cannot fulfill their potential and contribute significantly to national development if they lack the skills to access the relevant information.

In this regard, the findings of this study revealed that rural dwellers in the area under study used various skills to identify, access and use information from public libraries and other sources. Among the basic skills used by rural dwellers to identify, access and use information were visiting public libraries to consult the various information sources available such as printed materials (like books, newspapers, magazines and journals), audio/visuals, posters and fliers. This was indicated by 83.4% of the library users involved in the study. Aina's 2006 model suggests the CIRCs when established in the rural communities will collect all information materials in forms of audio and video-cassettes/DVDs, audio and video-record players, films, projectors, posters and leaflets on agriculture and will make them available to illiterate rural dwellers.Similarly, the findings of this study also showed that 80% of the library users were receiving information on radio as another skill they used to access and use information.

Furthermore, the findings of this study revealed that about 80% of the library users as rural dwellers confirmed that they also received information from town criers as another skill they used to access and use information for sustainable development of their communities. Cell phones also played an important role in providing access to information in rural areas. This fact was reported by 73.2% of the library users who noted that they used cell phones to identify, access and use information. More than 70% of the library users as rural dwellers further submitted that they also used other oral information sources to access and use information. These included contacting friends, neighbours and relatives. Other skills involving the use of oral sources by the library users were contacting people during market days, receiving information from village heads, religious leaders, oral traditional healers,

extension workers and gatekeepers. Aina's 2006 model suggests that in a rural setting, a public library and extension agents will identify gatekeepers who are living with the rural farmers. The gatekeepers will be the first point of contact for the farmers when they experience problems relating to their farming activiteis (Aina 2006). The library will then supply the gatekeepers with agricultural information for the farmers on a regular basis.

Accordingly, Chinwe, Ogbonna and Osuchukwu (2014) concurred and commented that rural dwellers are more familiar with oral information sources; as such their information needs are relative to such oral information sources and oral traditions. This view was also shared earlier by Etebu (2009) who stated that rural dwellers are accustomed to oral traditions and can better share the information exchanged in that way. Kiondo (1998) echoed similar sentiments in a study involving rural women in Tanzania, which found that rural women accessed information through friends and relatives, village leaders, health extension workers, hospitals and clinics.

The findings of this study also revealed that rural dwellers used other formal places such as health centers/dispensaries to identify, access and use information. This fact was confirmed by 64.1% of library users who indicated using health centers/dispensaries, while more than half (56.9%) of the library users used schools/adult centers to access and use information for sustainable rural development.

What the findings of this study confirmed was that rural dwellers in question did not solely rely on public libraries to access and use the information, but also used other formal and informal sources to access and use information. The findings also indicated that rural dwellers used a variety of skills or ways to find information inclusive of people and various forms of public media. Based on the findings, the categories of skills/ways used by the rural dwellers involved contact with people and physical facilities (such as libraries, viewing centers and health centers). However, contact with people was the dominant skill in the categories of skills used which indicated the importance of face to face communication. This impliedly shows that public libraries are expected to incorporate varied channels in disseminating information to rural dwellers particularly the oral sources which they largely understand better than printed sources.

These findings concur with those of Emmanuel (2012), who observed that the information seeking behaviour employed by rural farmers in Nigeria was mainly consulting friends, age

grade members, elders, neighbours, farmers, extension workers and print media (such as newspapers, books, manuals/handbooks and pamphlets). Jean (2012) further submitted that the skills used by diabetic patients in accessing information in the context of the USA were consulting doctors, nurses, diabetes educators, dieticians, pharmacists, family members and friends to access information. Others were consulting brochures/pamphlets, magazines, books, internet, and television. Moodley (2013) espoused the view that the library users accessed information from information providers as well as from convenient information sources they best understand, from the libraries.

The overall results of this study are consistent with the literature reviewed (Kiondo 1998; Mtega 2012; Churi et al. 2012; Mtega and Ronald 2013) which revealed that the multiple skills used by individuals in rural communities included using both formal and informal sources to access and use information. These sources included village heads, agricultural extension workers, health extension workers, hospitals and clinics, neighbors and friends, family/parents, audio/visuals, radio, TV, cell phones, internet, books, brochures, films, leaflets, newspapers, magazines, non-governmental organizations, farmers groups, personal experience, agricultural inputs suppliers, posters and agricultural shows. Other sources were social group gatherings, religious leaders, women's meetings, researchers, churches and mosques, notice boards and seminars which are information sources used by rural people.

6.5 Information sources and services used by rural dwellers to seek and satisfy their information needs from public libraries

In this section the opinions of the library users and directors of state library boards were solicited to identify the information sources used by rural dwellers to seek and satisfy their information needs from public libraries. Similarly, the opinionsof the heads of branch libraries were solicited to find out about the information services provided to rural dwellers.

Information sources: The findings of this study showed that rural dwellers in the area under study used various information sources to seek and satisfy their information needs from public libraries. Wilson's 1981 model of information behaviour suggests that information-seeking behaviour arises from the recognition of a need perceived by an information user, who, in order to satisfy that need, seeks information from formal sources or from informal information sources which may result in success or failure.According to Leckie's et al. 1996 general model of information seeking, the eventual success or failure of an information

seeking event is determined by the information sources available as well as the individual's awareness about these sources and their usefulness (Kerins, Madden and Fulton 2004).

Based on the findings, about 80% of the library users involved in this study revealed that the dominant information sources they used from public libraries to seek and satisfy their information needs were printed materials such as books, journals, newspapers and magazines. Likewise, 64.2% of the library users confirmed that they also usedposters and fliers as information sources from public libraries. More than half (56.3%) of the library users used audio/visuals materials as information sources from the libraries in order to seek and satisfy their various information needs.

Results from the interviews with directors of state library boards were similar, indicating that rural dwellers in the area under study used various information sources to seek and satisfy their information needs from public libraries. The findings showed that all the directors (5; 100%) interviewed confirmed that printed materials (such as books, newspapers, magazines and journals) were the major information sources available in the libraries for the rural dwellers. These findings are also consistent with those inNkabinde's study (1988), on public libraries as a community service in developing society in Botswana. Nkabinde (1988) found that the major information sources available in the libraries were books, magazines and newspapers.

However, two (40%) of the directors confirmed the opinions of the library users that other information sources such as posters, radio, television and other audio/visuals were also available. In addition, three (60%) of the directors acknowledged the availability of ICTs in the collections of some of their branch libraries.According to Williamson's 1998 model of information seeking and use, while an individual purposely seeks information in response to his/her perceived needs, it occurs through an intimate set of personal networks of the individual along with formal sources as well as the mass media (newspaper, television, radio and magazines) (Manyerere 2015:40).

These findings resonate with those of Anyalebechi and Udo-Anyanwu (2016) who found that the information sources available in the libraries for the users were more or less textbooks, reference materials, serials/journals, audio visuals, government publications, electronic information resources and foreign publication. Correa et al.(1997:8) noted that the most

effective means of communicating information to rural communities were audio-visual media such as radio, audio cassette and film.

The findings from this study indicated that the library users did not confirm the use of oral information sources in seeking and satisfying their information needs from the libraries under study. For example, more than 70% of the library users involved in this study confirmed that they did not receive information from gatekeepers as information sources from public libraries. Similarly, the findings revealed that more than 60% of the library users agreed and noted that Village Extension Workers (VEWs) and Community Health Extension Workers (CHEWs) as well as town criers as information sources were unavailable from the libraries.

Notable from the findings also was the unavailability of other formal places like Community Information Resource Centers and viewing centers that were supposed to be established by public libraries in rural communities. The findings revealed that 60.6% of the library users did not acknowledge the use of Community Information Resource Centers in seeking and using information in their rural communities. In stark contrast, Aina's 2006 model suggests that the establishment such centers in rural communities will ensure the extension of public library services to rural farmers. Likewise, the findings showed that 56.1% of the library users submitted that they did not use viewing centers in order to seek and satisfy their information needs. Similarly, ICT facilities as information sources were also unavailable in the libraries. This was indicated by more than half (46.7%) of the library users, while only 30.5% agreed in that respect and 22.9% remained indifferent. With the exception of ICT facilities, all (5; 100%) the directors interviewed confirmed the unavailability of these sources from public libraries. What these findings confirmed was that public libraries in the area under study did not incorporate oral information sources in the provision of information services to rural dwellers.

In sharp contrast to these findings, Bachhav (2012), Chaudhary and Kameswari (2015) and Sinha (2015) noted that the rural farmers, rural women and other rural dwellers in Pakistan, access information through various sources which included Community Information Centers (CIC), public libraries, other farmers or colleague farmers, as well as agricultural exhibitions. Similarly, Bachhav (2012), Chaudhary and Kameswari (2015) and Sinha (2015) confirmed the use of sources such as newspapers, magazines, television, radio, mobile phones as earlier found by the current study. Some of these views are also largely shared by Emmanuel (2012), Daudu and Mohammed (2013), Ifukor (2013), Anie (2014), Annune et al. (2014),

Idiegbeyan-Ose et al. (2015), Odefadehan et al. (2016) who showed that the information sources/channels used in disseminating information to rural dwellers include books, brochures, films, leaflets, newspapers and magazines but also town criers, oral information from neighbours,friends, age groups, elders, farmers groups, village leaders, agricultural extension officers, family/parents, radio, TV, internet, , colleagues, market places, mobile phones, socio-political meetings, traditional festival, role play, songs and dance, lectures and exhibition.

Adequacy of the information sources: The findings of this study showed that 60.8% of the heads of branch libraries were of the opinion that the information sources available were adequate. Likewise, 82.3% of the heads of branch libraries also claimed that the information sources available were relevant to the information needs of the rural dwellers. Similarly, 54.9% of the heads of branch libraries noted that the information sources available in the libraries were also current. However, both the directors of the state library boards and the library users did not agree with this opinion. The two groups disagreed with the notion that the information sources available in the libraries were adequate, relevant and current (for details see section 6.7 and 6.9).

Information services: Information services are important aspects that facilitate information seeking activities of library users in their attempt to satisfy their information needs from public libraries. Aina's 2006 model suggests that public libraries are expected to redesign and repackage their information sources and services and tailor them to languages and formats accessible to rural farmers. The public libraries are primarily established to provide timely, accurate, pertinent and reliable information services to their users (Ebiwolate 2010). In this regard, the provision of public library and information services entails acquiring, organising and making relevant information resources accessible through appropriate facilities and means best known to the users (Iwhiwhu and Okorodudu 2012). The provision of public library services is a way of improving the levels of literacy and education of users, and enhancing their capability to effectively use information relevant to their daily lives (Oni, Nomuje and Oshiotse 2014).

The findings of this study revealed that the information services provided by the libraries in the area under study were predominantly traditional services (like reference services, circulation services, lending services, serial services and children services). This fact was indicated by 90.2% of the heads of the branch libraries. The findings also showed that the

libraries provided awareness campaigns on government policies as indicated by 53% of the heads of branch libraries. Based on the research findings these were the only two information services provided for rural dwellers by the libraries in the area under study.

All the directors (5; 100%) interviewed unanimously confirmed the opinions of the heads of the branch libraries that the dominant library services provided in the branch libraries were traditional services. However, two (40%) of the directors acknowledged the provision of other services such as organizing seminars and workshops, debates and competitions, adult literacy programmes and extension services in their branch libraries.

The findings of this study concurred with those of Ngcobo (2005) who carried out research on the role of community libraries in enhancing education in the context of South Africa. The study found that the library services available for the library users included lending services, reference services, audio/visuals, and organizing debates among school-going children, facilitating adult basic education and training programmes for the adults. Other services were education, entertainment, relaxation and awareness of various issues. Likewise, Akinola et al. (2013) in their research which focused on public libraries in meeting the information needs of post-secondary students in the context of Nigeria found that the dominant services available in those libraries were lending and reference services. The results showed that most (118; 81.4%) of the respondents indicated that the libraries provide lending services, while 108 (74.5%) of the respondents reported that the libraries provide reference services.

However, based on the findings of this study, most of the heads of branch libraries did not agree that other services like adult literacy programmes, translation services, mobile services, organizing meetings, workshops, seminars, as well as information repackaging were available in the libraries. The findings showed that 49% of the heads of branch libraries did not acknowledge the provision of adult literacy programmes in the libraries. Likewise, more than 60% of the heads of branch libraries were of the view that translation and information repackaging services were not provided by the libraries. Similarly, 49.1% of the heads of the branch libraries did not agree that the libraries organized meetings, workshops and seminars for rural dwellers.

These findings are in sharp contrast to those in Nkabinde's (1988) study. The study found that the major roles that public libraries play in national development are eradicating

illiteracy, organizing conferences on libraries and literacy, and establishing reading rooms in the rural areas. Likewise, Ebiwolate (2010) commented that public library services to rural dwellers in the context of Nigeria were more or less bookmobile services, information and referral services, outreach programmes, current awareness programmes, library services to children and selective dissemination of information. However, in this study the opinions of the library users were then solicited on the impact made by the information services provided made on the lives of the rural dwellers in the area under study.

The impact of information services on lives of rural dwellers: The findings of this study revealed that the information services provided by the libraries in the area under study had made a significant impact on the lives of rural dwellers who patronized the library services. The overall results indicated that the impact made by the information services on the lives of rural dwellers were mainly felt in their educational lives, increased awareness on government policies and programmes along with increased knowledge on health related issues. Library services also impacted on economic activities, wellbeing, and skills acquisition, improved farming activities, adult literacy levels as well as improved cultural and recreational activities.

The findings indicated that for 80.4% of the library users the information services provided to them by the libraries had a significant impact on their educational lives. Likewise, the findings showed that for 74.7% of the library users the information services provided by the libraries impacted on their lives in terms of awareness on government policies. More than 60% of the library users confirmed that the information services provided by the libraries had made a significant impact on their lives in terms of increased knowledge on health related issues. The information services provided by the libraries in the area under study had also impacted on the lives of rural dwellers in terms of economic activities. This was indicated by more than half (57.8%) of the library users involved in the study. The findings also revealed that for 56.9% of the library users, the information services provided by the libraries made a significant impact on their general wellbeing.

The findings also showed that for more than 50% of the library users, the information services in question made an impact on their lives in terms of skills acquisition, occupation, improved farming activities and adult literacy levels. Based on the findings, 42.8% of the library users agreed and noted that the information services provided to them by the libraries had impacted on their lives in terms of cultural and recreational activities.

Although the findings of this study indicated that the information services provided by the libraries impacted on the lives of the library users in many ways, it is noteworthy that this impact was predominantly felt in the lives of those library patrons who were educated. The number of illiterate rural dwellers who patronized the library services was insignificant (see sections 6.2.3 and 6.2.4). The findings indicated that the majority of illiterate rural dwellers were not even aware of the library services which resulted in low patronage of the library services by this category of people (see section 6.7).

What these findings confirmed was that the impact was mainly on the lives of the literate rural dwellers that based on the estimates, comprised less than 30% of the total population in rural areas in Nigeria. Aboyade (1984) and Mbofung (1995) cited in Iwe (2003) confirmed that about 70% of the population of every average rural community in Nigeria suffers from illiteracy. Concurring, Aina (2006:2) noted that over 70% of people in Nigeria are living in rural areas and are mainly farmers who are illiterates who cannot read and write in any language. In this regard, Harande (2009:4) reached the conclusion that the information needs of the majority of rural dwellers are not met, which is the major reason for underdevelopment in the rural areas. This opinion was also shared by Ejedafiru (2015) who noted that the information services provided in Nigeria only catered for the information needs of the educated elite who comprised about 20% of the population, while the 80% illiterate rural dwellers remained deprived in terms of information services to meet their information needs.

On the basis of these facts, research by Tabor (2009) on information for rural communities in Nigeria, confirmed that a public library is of little or no importance to rural dwellers. This is because rural dwellers were accustomed to the spoken word and can better relate to information communicated in this way. Similarly, research by Ovwasa (2014) which focused on the impact of public libraries on rural dwellers in Nigeria, found that the libraries did not positively impact on the living conditions of the rural dwellers. In this regard, Oni et al. (2014:66) pointed out that librarians need to repackage information resources and services, and then tailor them to the relevant and appropriate languages and formats, before they can meet the information needs of rural inhabitants.

Availability of library equipment/facilities: The opinions of the heads of branch libraries were sampled in order to assess the availability of library equipment/facilities in the libraries under study. This is another factor that facilitates the provision of and accessibility of effective public library services in the rural areas. From the findings, 68.7% of the heads of

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branch libraries confirmed that the libraries had good furniture for reading. However, the findings revealed that the libraries under study had no vehicles/vans as indicated by 84.3% of the heads of branch libraries. Likewise, 72.5% of the heads of branch libraries acknowledged the unavailability of ICT facilities in the libraries. The findings also showed that 58.8% of the heads of branch libraries confirmed that the libraries were not occupying proto-type buildings.

These findings showed that the libraries lacked most of the basic equipment/facilities needed for the provision of effective information services in the rural areas. These findings resonate with those of Oyovwe-Tinuoye et al. (2015) on public library services for national development in the Nigerian context. Their study found that library facilities such as good buildings, air conditioners, chairs, conducive environments, internet facilities, good lighting, fans and fire extinguishers were found to be inadequate for enhancing the provision of the library services. Farah (2013), in research on public libraries in the context of Kenya, also confirmed that even though there were tables, chairs, shelves, computer tables, offices and toilets in the libraries, they were grossly inadequate. In addition, the study found that the libraries lacked facilities such as audio visual devices, internet facilities, radios, tape recorders, overhead projectors, film projectors, video cassette recorders and audio recording equipment. For Oluwaseunfunmi (2015), unlike Farah (2013), who carried out a study on public library resources and services for young adults in Nigeria which involved 110 registered young adult users, found that 79.3% of the respondents revealed that there were spacious reading rooms; 89.1% of the respondents noted that there were comfortable reading chairs and tables; while 83.6% of the respondents revealed that there was adequate ventilation and other lighting. These respondents, 82.6%, also noted that there were fire alarm systems installed at key locations, and 75% of the respondents revealed that there were fire extinguishers installed at key locations. Some 89.1% of the respondents indicated that there were clean public convenience facilities in the libraries.

For Saleh and Lasisi (2011), unlike for Oyevwe-Tinuoye et al.(2015) and Fara (2013) ,in their study on public library services in the Nigerian context, they noted that the available library equipment and facilities those libraries had adequate shelves, catalogue cabinets, cupboards, reading tables and reading chairs, book trolleys and display racks.

Avialiability of rural infrastructural facilities: The findings of the current study revealed that in the opinion of the heads of the branch libraries and library users, rural infrastructural

facilities were available in the rural areas. Among the infrastructural facilities available as acknowledged by the two groups were electricity power supply, good telecommunication services, good road networks/accessible roads and good transport systems. Others include portable water, good health services and education.

The findings revealed that more than 50% of the heads of branch libraries noted the availability of electricity supply and effective telecommunication systems in the rural areas. The library users acknowledged that there was rural electricity (71.9% of users) and good telecommunication services (69% of users) in their rural communities. The findings also showed that more than 60% of the heads of branch libraries agreed and noted that there were good transport systems and good road networks in the rural areas. The findings also revealed that 59.6% and 47.9% of the library users confirmed that there were good road networks/accessible roads and good transport systems respectively in the rural areas. Based on the findings of this study, about 60% of the library users further submitted that there were good health services in their rural areas and more than 50% of the library users revealed that there was educational infrastructure and portable water in their rural areas.

Rural infrastructural facilities are essential in the provision and utilization of public library services in rural areas. For example, good road networks and other transport systems enable the libraries to easily reach out to rural communities with the services. Electricity and effective telecommunication systems are also needed for the use of ICTs and other audio/visual facilities in the libraries. Likewise, water is also needed for utility and maintenance of the libraries.

Although the two groups of participants acknowledged the availability of these infrastructural facilities in the rural areas, at the same time the two groups, including the directors interviewed, acknowledged that basic infrastructural facilities were lacking in most of the rural areas under study (for details see sections 6.7 and 6.9). The absence of this basic infrastructure had the effect of adversely affecting the provision and utilization of information services in terms of film shows, photocopying services, internet services, and on-line public access catalogues, lighting and other utilities and maintenance services.

Iwe (2003) observed that the majority of rural areas in Nigeria lacked good access roads, pipe-borne water, electricity and factories or industries. Egbe (2014) who conducted research on rural and community development in Nigeria found that rural areas lack virtually all

infrastructural and social amenities like roads, medical and health facilities, portable water, and electricity among others. This view was also shared by Ugwuanyi and Chukwuemeka (2013) and Anie (2014) who noted that rural communities are areas characterized by poverty, high levels of illiteracy, unemployment, subsistence economy, and lack of economic and social amenities (such as roads, electricity, piped water, hospitals, banks, industries and rural telephony).

6.6 Channels used by public libraries in disseminating information to rural dwellers

In this section the opinions of the heads of branch libraries were solicited on the channels used by public libraries under study in disseminating information to rural dwellers. Suitable channels for information dissemination are fundamental means of reaching out to library users with the relevant information sources and services that can meet their information needs. Wilson's 1981 model suggests that it is part of information behaviour to use the appropriate channels in disseminating information to an information user. The model demonstrates that these channels are essential to effective information exchange and information transfer within an information system (Wilson 1999:251).

Accordingly, Ifukor (2013) opined that the channels of information acquisition and dissemination are the means of transferring or exchanging of information from one person to another or from one place to another. The channel through which information is disseminated is the determining factor for the accessibility of and utilization of information by the information user.In this regard, the peculiar nature of rural communities should not be overlooked in choosing the appropriate channels in disseminating information to them (Daudu and Mohammed 2013).

The findings of this study revealed that the dominant channels used by public libraries in the area under study in disseminating information to rural dwellers were printed materials. The findings showed that almost all or 48 (94.1%) heads of the branch libraries revealed that the libraries used printed materials to disseminate information to rural dwellers. Almost as many, 46 (90.2%) heads of the branch libraries confirmed that the libraries also used centralized services at the local government headquarters to disseminate information to rural dwellers. Thus this finding confirmed that this location of the libraries does not enable rural dwellers to effectively patronize and access information easily as they had to travel a distance from their

different communities to local government headquarters in order to access the required information.

The findings of the study also revealed that other channels used by the libraries to disseminate information to rural dwellers were audio/visuals, posters and fliers. The research findings indicated that more than 70% of the heads of branch libraries confirmed that the libraries used posters and fliers in disseminating information to rural dwellers. More than 60% of the heads of branch libraries noted that the libraries also used audio/visual facilities to disseminate information to rural dwellers in the area under study.This finding was consistent with Aina's 2006 modelwhich suggests that information materials such as audio and video-cassettes, audio and video-record players, films, projectors, posters and leaflets on agriculture are expected to be collected by the Community Information Resource Centers as channels for information transfer to rural farmers.

However, the overall results of this study indicated that the libraries under study did not use Community Information Resource Centers, ICTs, extension workers and town criers to disseminate information to rural dwellers. The findings indicated that 51% of the heads of branch libraries did not acknowledge the use of Community Information Resource Centers in disseminating information to rural dwellers. The findings also showed that more than 70% of the heads of branch libraries confirmed that the libraries did not incorporate ICTs, town criers and gatekeepers in the dissemination of information to rural dwellers; and 64.7% did not acknowledge the use of extension workers by the libraries in disseminating information to rural dwellers. What these findings confirmed was that the libraries in the area under study did not use oral information sources and ICTs to disseminate information to rural dwellers.

These findings are in sharp contrast with Aina's 2006 which suggests a triangular linkage between farmers, extension agencies and public libraries in the provision of agricultural information to rural farmers. Based on this model, it is expected that the CIRCs which will be established in rural communities which will provide information directly to farmers and extension agents. The linkage demonstrates farmers and libraries will receive agricultural information directly from extension agents as the farmers will be able to forward their information needs to the library and extension agencies.

Similarly, the findings of this study are inconsistent with some of the channels identified in the literature reviewed, for example,Emmanuel (2012); Daudu and Mohammed (2013);

Ifukor (2013); Anie (2014); Annuneet al. (2014); Idiegbeyan-Ose et al. (2015); Odefadehan, Akinola, and Odefadehan (2016) who found that the information channels used in disseminating information to rural dwellers included town criers, oral information from neighbours,friends, age groups, elders, farmers groups, village leaders, agricultural extension officers, family/parents, films, colleagues, market places, mobile phones, socio-political meetings, traditional festival, role play, songs and dance, demonstration, lecture and exhibition, and internet among others.

Ramachandranet al.(2006) in their research on communication channels in a rural community in India found that more than 80% of the villages have community TV and cable connections. The findings showed that television is the main source of information (100%) and the channel of communication that could reach out to what they called "the interior pockets" villages; 53% of villagers get information through local panchayats; 55% through wall posters; 43% through Pandora; and 18% through loudspeaker announcements.

6.7 Challenges faced by the rural dwellers in accessing and using information from public libraries

In this section the opinions of the library users as rural dwellers were solicited on the challenges they faced in accessing and using information from the libraries under study. It is common phenomenons that in every community people face some particular challenges in seeking and using information. These challenges or barriers could be on the part of the information users, information providers, societal norms and values, or the information system itself. Wilson's 1981 second model of information-seeking behavioursuggests that an information seeker in his/her effort to obtain information to satisfy the basic needs, s/he is likely to meet with different barriers (Wilson 1999:252). These barriers could be personal, interpersonal or environment related.

In a rural setting, Aina's 2006 model suggests that the public library and extension agents will identify gatekeepers who are living with the rural farmers. The gatekeepers will be the first point of contact for the farmers when they experience problems relating to their farming activiteis (Aina 2006). The library will then supply the gatekeepers with agricultural information for the farmers on a regular basis. This will significantly address the challenges faced by rural dwellers in seeking and using information from public libraries.

The findings of this study revealed that rural dwellers in the area under study faced a number of challenges (barriers) in seeking and using information from public libraries. The biggest challenge faced by the rural dwellers was the centralization of library services at the local government headquarters. The findings indicated that for 297 (89.5%) of the library users the centralization of the library services at the local government headquarters was a major challenge to them in seeking and using information from the libraries. A typical rural dweller had to travel a distance from his/her rural community to the local government headquarters in order to seek and use information from a public library.

This finding is in agreement with that of Nkechi (2015) who observed that the establishment of public librariesin Nigeria was concentrated in urban centers, while rural communities are neglected.Nnadozie et al. (2015:11) echoed a similar sentiment thatthe establishment of rural libraries in Nigeria for the extension of public library services beyond state capitals has been a challenge over the years. In this regard, Momodu (2012:95) argued that library services could only reach the grassroots level, if local government councils are given the mandate to establish and finance libraries in their communities. Similarly, Igwe et al. (2015:168) suggested that public libraries in Nigeria need to be given adequate attention, decentralized to local government areas, and empowered to provide core services for the rural dwellers.

The findings of this study showed that there was an absence of library services in rural communities as indicated by 83.4% of the library users involved in this study. These findings are consistent with those of Oluwaseunfunmi (2015:10) who noted and commented that fewer young adults in the rural areas use the public library as a result of unavailability of public library services in the rural areas.The findings also tallied with those of Ejedafiru and Toyo (2015:21) who confirmed that library and information services are lacking in rural communities, despite the fact that rural communities constitute the larger population. Nkechi (2015) echoed a similar sentiment that in Nigeria the establishment of public libraries was concentrated in urban centers, while rural communities are neglected.

Ejedafiru and Toyo's (2015) study on rural libraries and the need for virtual libraries in Nigeria concurred and they commented that there were great differences between urban and rural dwellers in terms of accessibility to public library services and ability to read and write. This was because public libraries and other information service providers are either non-existent in the rural areas or are performing poorly in publicizing government activities and

programmes designed for rural people (Daudu and Mohammed 2013). In this regard, Patience (2015:353) confirmed that there is an absence of public libraries in rural communities.

The findings of this study also revealed that 84.1% of the library users felt that library services in rural communities were ineffective in meeting their information needs.Concurring, Salman et al. (2017) reported that about two thirds (219; 60.8%) of their respondents suggested improvement in the quality and quantity of the services provided by the libraries.Etebu (2009) held the view that in Africa, provision of information services was based on traditional methods that are appropriate for literate people may not be appropriate for rural dwellers. This is because majority of rural dwellers are used to oral tradition.

In addition, Etebu (2009)was also of the opinion that unless information providers assess and recognize their target groups and devise the best means, they cannot disseminate meaningful information for sustainable development to rural dwellers.Momodu (2012:95) concurred that due to this depressing challenge, most rural libraries cannot meet with the information needs of their communities.Momodu (2012:95) further suggested that the libraries can disseminate information to the rural populace by way of organizing exhibitions, giving lectures and talks (Momodu 2012:95).

Research byNnadozie et al. (2015) foundthat the manual system of library service delivery, which is still prevalent in Nigeria, is fraught with shortcomings that made the system to be inadequate in meeting the challenges of information services needed in this millennium. Accoding to Agodi and Obasi (2016), this was becausepublic libraries in Nigeria lacked well defined programmes and policies. Agodi and Obasi (2016) added that this negated the libraries from rendering effective and efficient information services to enhance economic and educational development in Nigeria.

The findings of this study also showed that more than 80% of the library users were in agreement that the information resources available in the libraries were inadequate or inappropriate to cater for their information needs. Nyana (2009:9) observed that the major hindrances to effective provision of information and services in Africa were inappropriate collections, high levels of illiteracy, and lack of incorporating oral tradition in the provision of information services among others.Obinyan et al. (2011) also noted that the information resources in public libraries in Nigeria were inappropriate for the library users and were not even readily available for them. Salman et al. (2017) pointed out that the challenges affecting

access to and use of the library services were irregular electric supply, disorganized and out of date library materials, inadequate information sources, resources and facilities, non-functional library catalogues, and the poor attitude of staff and lack of professionally qualified library staff.

From the findings of this study, it is noted that 74.4% of the library users were of the opinion that the libraries under study were fraught with a lack of qualified library personnel. This challenge had adversely affected the provision of effective information services to rural dwellers. Abdulkarim (2010) noted that most public libraries in Nigeria lack adequate and professional staff needed to manage the affairs of the libraries effectively and efficiently.A research carried out by John-Okeke and Owoeye (2011) as an overview of public library services in Nigeria, revealed that generally libraries in the local government areas are headed by non-professionals librarians who lacked the necessary qualifications to operate the libraries. Likewise, Momodu (2012:95) confirmed that lack of qualified personnel is one of the problems often encountered in running the activities of public libraries in Nigeria.

Research conducted by Oluwaseunfunmi (2015) revealed that a majority of the respondents (59.8%) confirmed that public libraries lacked qualified staff to provide effective services to their users.In this regard, Igiamoh and Ogunwemimo (2013) had earlier argued that unless public librarians are adequately and properly trained with the necessary skills and knowledge that will prepare them for the task ahead, they will never be efficient in discharging their individual responsibilities.

The findings of this study have revealed that more than 80% of the library users involved in this study confirmed that there was a total absence of Community Information Resource Centers to extend public library services in rural communities. This opinion was expressed by Maepa (2000) in a research which showed that only 13.6% of the respondents indicated the availability of library or Community Information Centers in their villages, while 80.1% indicated unavailability of library or Community Information Centers in their villages, and 6.3% indicated their unawareness on the availability or otherwise.Igwe et al. (2015:168) notes that one of the major challenging scenirios confronting the provision of library and information services is absence of community libraries and Information Centers.

Similarly, Igwe et al. (2015: 168) pointed out that Community Information Centres are hardly seen in Nigeria for providing information services to rural dwellers. They claimed that where

they exist, the dilapidated nature and state of information and human resources, as well as poor infrastructural facilities, will not enable them to meet the information needs of the rural dwellers. Olanrewaju (1998) advocated then that local government authorities in collaboration with public libraries should as a matter of principle establish Rural Community Information Service Centers in rural communities. These centers will serve as regular television and occasional video-viewing as well as radio and gramophone record listening centers. Olarenwaju (1998) added that they could also serve as centers for the exhibition of posters that could espouse public enlightenment campaigns in various rural communities.

Furthermore, the findings of this study have revealed that more than 70% of the library users in the area under study were faced with the challenge of poor telecommunication systems and lacked adequate infrastructural facilities in the rural communities to facilitate the provision and utilization of the library services. This finding was also reported by Jiyane (2002) in a study which confirmed that generally the major challenges faced by the rural women in accessing and using information in the context of South Africa, were illiteracy, time, unavailability of formal places for information accessibility and poor infrastructure (such as poor roads, telephones and electricity). This view has also been shared by Ugwuanyi and Chukwuemeka (2013) and Anie (2014).

Another challenge faced by rural dwellers in seeking and using information from public libraries was economic constraints. The findings of this study showed that about 60% of the library users confirmed that there was abject poverty among rural dwellers. Based on these facts, rural dwellers in the area under study would find it difficult to abandon their daily activities for survival and travel to local government headquarters to seek and use information from public libraries. Harande (2009:3) concurred and noted that poverty and illiteracy are two major barriers that hamper sustainable rural development. Esievo and Adewole (2014:101) also noted that the use of library resources in rural communities was insignificant due to lack of awareness of the services, illiteracy and poverty among the rural dwellers.

Similarly, the findings of this study are in agreement with those of studies from Tanzania (Kiondo 1998) and Nigeria (Kari 2007; Kamba 2009; and Idiegbeyan-Ose et al. 2015) which found thatthe majority of rural dwellers lack access to basic information services due to their low income levels. Likewise, Adewole (2014:101) noted that the use of library resources in rural communities was insignificant due to lack of awareness of the services, illiteracy and

poverty among the rural dwellers. Research by Chinwe et al. (2014) and Ejedafiru (2015) found that poverty was one of the major challenges affecting the provision and utilisation of public library services in rural areas. Agodi and Obasi (2016:54) concurred that the poor economic, educational and political situationin Nigeria had over the years been the cause of public library services to decline. Consequently, this had led to poor perception and patronage of public library services by the society (Obasi 2016:54).

The findings of this study also showed that about 70% of the library users said that rural dwellers were challenged by the language barrier in seeking and using information from public libraries due to their literacy levels. In line with this, Aina's 2006 model suggests that public libraries are expected to redesign and repackage their information sources and services and tailor them to languages and formats accessible to rural farmers.Omopupa (2006:11) and Ejedafiru (2015:21) commented and noted that the provision of public library services in rural communities is very poor or nearly absent, because of the widening literacy gap between the neglected rural dwellers and their counterparts in the urban centers. Kari (2007), Kamba (2009) and Idiegbeyan-Ose et al. (2015) espoused the view thatthe majority of rural dwellers lack access to basic information services due tolanguage barriers.

Similarly, Momodu (2012:95) noted that among the challenges encountered by rural libraries was the inadequacy of information sources in local languages. This was because most of the library books are published in English when most of the rural dwellers cannot even read and writes in their native languages (Momodu 2012:95). Similarly, research Chinwe et al. (2014) and Ejedafiru (2015) found that language barrier was one of the major challenges affecting the provision of public library services in rural areas. Research by Oni et al. (2014) found that language was one of the major barriers to information accessibility among rural inhabitants. Hence, Anie (2014:209) suggested that translation of relevant materials into local languages that can best be understood by rural public library users should be undertaken.

Generally, the findings of this study are in tandem with those of Kari (2007), Kamba (2009), Mtega and Ronald (2013) and Idiegbeyan-ose et al. (2015) who in their studies found thatthe majority of rural dwellers lack access to basic information services due to high rates of illiteracy, poor information infrastructure, irrelevant information services, poor attitude of rural extension workers, low income, language barriers, as well as unstable electricity and high cost of ICTs in the rural areas.

6.8 Suggested solutions to the challenges faced by rural dwellers in seeking and using information from public libraries

In this section the opinions of the library users were sought on how the identified challenges faced by rural dwellers in seeking and using information from public libraries could be addressed. The findings of this study revealed that 88.8% of the library users involved in the study pointed out that provision of adequate and relevant information sources and services in public libraries would address most of the challenges they faced in seeking and using information from public libraries. Moodley (2013) suggested then that a high quality library collection should be provided coupled with internet access and provision of outreach programmes.

The findings of this study also showed that 85.2% of the library users suggested the establishment of Community Information Resource Centers in rural communities. Maepa (2000) noted that the establishment of Community Information Centers would ensure effective information provision in rural villages. Aina's 2006 model suggests the establishment of CIRCs in rural communities to provide information to rural farmers. With the establishment such centers public libraries can extend their services to rural dwellers. Through these centers public libraries can provide all the information sourcesand services relevant to the information needs of the rural dwellers.

Kamba (2009) and Ejedafiru (2015:23) also agreed and suggested that the existing gap between rural communities and urban centers can be bridged through the establishment of Community Information Centers. Igwe et al. (2015:163) noted that the establishment of Community Information Centers in Nigeria will address the challenges involved in disseminating information in rural communities. Such centers can be avenues for documenting indigenous knowledge and culture, and learning resource centers for mass literacy, adult and non-formal education programmes (Anie 2014). Daudu and Mohammed (2013:240) remarked that the establishment of Community Information Centers can ensure the provision of adequate and satisfactory information to rural communities.

Furthermore, the findings of this study showed that 89.5% of the library users believed that the provision of basic infrastructural facilities in the rural areas would address some of the challenges they faced in seeking and using information from public libraries. Oni, Nomuoje and Oshiotse (2014:74) suggested that government should eliminate or reduce the problem of erratic power supply, poor network and bandwidth for sustainable development in rural

development which will prevent rural-urban migration. Likewise, Onyenachi et al. (2015:45) suggested that government should give rural electrification the necessary attention and ensure ICTs and internet connectivity for rural library staff in the provision of the library services in rural areas.

The findings of this study showed that 86.5% of the library users advocated that the provision of adult literacy programmess in rural areas would address the challenges of high illiteracy rates among rural dwellers and language barriers. This finding agrees with Patience (2015:353) who suggested that there should be literacy campaigns and programmes to encourage and educate rural dwellers in order for them to be able to access information in their community libraries. Likewise, Momodu (2012:94) suggested then that adult literacy classes be introduced to espouse the federal government programme for adult literacy in which case the services of retired teachers in the communities could be engaged in the programme.

The findings also revealed that better marketing and publicity of the library services to rural dwellers (as indicated by 84.3% of the library users) would be helpful in creating awareness of the library services among rural dwellers. If rural dwellers were aware of the existence of public library services they would be patronizing and accessing the services provided. Harande (2009:5) commented that if public libraries are given the necessary attention they will ensure an advanced level of awareness among rural dwellers. Likewise, Amusan, Oyetolaand Ogunmodede (2012:221) advocated then that the state library boards through their branch libraries in all the local government areas should make public libraries accessible to the general populace most especially the rural dwellers who are mostly illiterates.

From the findings, 82.5% of the library users believed that training and retraining opportunities for the library staff would enable them to provide relevant and effective information services to rural dwellers. This finding is consistent with that of Opara (2008:357) who suggested that training and retraining opportunities should be guaranteed for library staff particularly in the areas of ICT and management so that they can be innovative and creative in the provision of effective services and management of resources. Likewise, Emojorho and Ukpebor (2013:27) also found that staff of public libraries should be trained and assigned with the responsibility of providing effective services that will ensure the attainment of health millennium development goals (MDGs). Oni et al. (2014:74) suggested that information officers should be posted in rural communities and should be given training

and retraining opportunities frequently so as to equip them with the basic skills and knowledge.

The findings of this study indicated that about 80% of the library users involved in this study suggested the provision of information repackaging services which they believed would enhance information seeking and use from public libraries by rural dwellers. Aina's 2006 model suggests that public libraries are expected to redesign and repackage their information sources and services and tailor them to languages and formats accessible to rural farmers.This opinion was expressed by Omopupa (2006:13) who advocated that since rural communities are farming communities, information on how to improve their farms should be provided through information services such as repackaging, audio/visuals, mobile libraries, among others.

Similarly, Amusan et al. (2012:221) suggested that information repackaging, awareness campaigns, human resources development, mobile libraries and outreach services as well as capacity building could serve as strategies that public libraries can adopt to overcome their challenges particularly in the attainment of MDGs for education. Oni et al. (2014:66) further suggested that librarians should repackage information resources and services, and then tailor them to the relevant and appropriate languages and formats to meet the information needs of rural inhabitants. Chinwe et al. (2014:43) also suggested that rural libraries should use oral information sources which are best understood by the rural dwellers to provide information services.

The findings of this study showed that over 70% of the library users as rural dwellers suggested that translation services should also be provided to assist the illiterate rural dwellers in seeking and using information from public libraries. This view is consistent with that of Anie (2014:209) who suggested that there is a need for translating relevant materials into local languages that can be read and understood by most of the potential public library users in the rural areas. Anie also suggested that there should be a written information policy to serve as a prerequisite for every state and local authority involved in information provision in Nigeria, provision of updated information resources for the rural public libraries and adequate budgetary allocations should be made and approved in resolving issues facing the libraries.

6.9 Challenges associated with provision of public library services in rural areas

In this section the opinions of the heads of branch libraries and directors of the state library boards were solicited on the challenges associated with the provision of public library services in the rural areas. In Nigeria, the provision of public library services in rural areas like in any other developing country is fraught with multiple challenges that reflect so many inadequacies. For example, Olanrewaju (1998:4) observed that easy accessibility to appropriate information has not been ensured for rural dwellers. This is because the provision of public library services in rural communities is very poor or nearly non-existent, as a result of the widening literacy gap between the neglected rural dwellers and their counterparts in the urban centers (Omopupa 2006:11; Ejedafiru 20015:21). Some scholars such as Agodi and Obasi (2016:54) hold the view thatover the years public libraries have not been included in the implementation of government programmes and policies aimed at meeting the economic and educational needs of the people.

The challenges identified by the heads of branch libraries and directors of state library boards pertained to funding, outdated collections and poorly stocked libraries, location of libraries; poor physical infrastructure, staffing, lack of awareness of library services among rural populations, language barriers and illiteracy, and lack of library policies. The findings as regards these challenges are discussed below.

Based on the findings of this study, inadequate funding generally was the major challenge that limited the provision of public library services in the rural areas. The findings of this study showed that 92.2% of the heads of branch libraries held the view that the libraries under study were grossly underfunded. This scenario hampered the provision of effective public library services in the rural areas.Results from the interviews showed that the issue of poor funding of the libraries was a common complaint among most of the directors (4; 80.0%) interviewed. They reported that their budgetary allocations for the procurement of information resources and other services for rural dwellers were not being granted. These findings agreed with Nwokocha's (1998) who noted then that public libraries in Nigeria are generally confronted with the challenge of poor funding which hampers the provision of public library services particularly in rural areas. This opinion was also shared by Ntui (2005) who noted and observed that in the last decade, public libraries in Nigeria have been in a critical condition due to poor funding.

These findings also agreed with Opara (2008:352) who earlier noted that in Nigeria public libraries are not adequately funded, in fact all other problems these libraries have emanate from the poor funding. Likewise, Abdulkarim (2010) observed that financial crises had adversely affected the structure and maintenance of the library buildings, the size and content of the collections, as well as the overall provision of the services.In this regard,Iwe (2003), Ntui (2005), Opara (2008), Folorunso and Folorunso (2010) and Igiamoh and Ogunwemimo (2013) in their research found that the public library system in Nigeria needs proper funding through adequate budgetary allocations to support the library activities in terms of provision of resources (human and material) and effective services in the rural areas.

With regards to library facilities which are largely dependent on funding, the findings of this study revealed that 94.1% of the heads of branch libraries reported that the library facilities were inadequate. Likewise, 88.2% of the heads of branch libraries noted that public libraries in the area under study were faced with the challenge of inadequate information resources to provide effective services in the rural areas. Results from the interviews conducted revealed that most of the directors (4; 80%) confirmed that information sources in the branch libraries were grossly inadequate due to poor funding of the libraries. These findings concurred with those of Salman et al. (2014:40) who noted that public libraries in Africa are largely neglected which has led to their poor state in terms of poorly stocked and outdated materials. Likewise, Akinola et al. (2013) found that among the major challenges faced by the libraries were inadequate information resources, erratic power supply and poor internet access, lack of enough seating space, lack of conducive environment for reading and irrelevant materials.

Furthermore, the findings of this study have shown that more than 80% of the heads of branch libraries confirmed the absence of Community Information Resources Centers in rural communities to extend public library services in rural areas. This opinion is consistent with those of Maepa's (2000) study which found that only 13.6% of the respondents indicated the availability of library or Community Information Centers in their villages, 80.1% indicated unavailability of library or Community Information Centers in their villages, and 6.3% indicated their unawareness on the availability or otherwise. Olanrewaju (1998) advocated then that local government authorities in collaboration with public libraries should as a matter of principle establish Rural Community Information Service Centers in rural communities. These centers will serve as regular television and occasional video-viewing as well as radio and gramophone record listening centers. Olarenwaju (1998) added that they could also serve

as centers for the exhibition of posters that could espouse public enlightenment campaigns in various rural communities.

The findings of this study also revealed that 84.4% of the heads of branch libraries in the area under study acknowledged that most of the library buildings were dilapidated. Although the renovation of some of these libraries in question was in progress in some states, two (40%) of the directors interviewed indicated that they had a number of dilapidated library buildings in their branches. From observation, the researcher noted that there were a number of dilapidated library buildings in the area under study which needed the urgent attention of the authorities concerned. The findings also revealed that in some states a number of local governments lacked public libraries completely, while in the states where they do exist, they lacked standard library building structures, and a number of them were occupying converted buildings either rented or donated.

These findings support those of Opara (2008:354) who observed that in Nigeria, only a few public library buildings are adequate or in good condition. Opara (2008:354) added that most of these library buildings are dilapidated and forlorn, and their branches in some local government areas are either in rented or donated accommodation. Nkabinde's (1988) study in Botswana found that the library services were adversely affected by challenges such as lack of suitable accommodation, irrelevant reading materials stocked in the libraries, as well as illiteracy among the rural villagers. Other research carried out by John-Okeke and Owoeye (2011) on public library services in the context of Nigeria, found that the library buildings lacked enough space to comfortably accommodate more users and lacked air conditioners for a conducive learning and leisure atmosphere, as well as insufficient space for recreation. Not only that, Opara (2008:356) further observed that in most public library buildings in Nigeria, provision has not been made for physically challenged users.

The findings of this study also showed that 84.3% of the heads of branch libraries noted that the libraries suffered from inadequately trained staff to provide effective services in the rural areas. Some 68.7% of the heads of branch libraries revealed that staff training and retraining opportunities were grossly inadequate. Results from the interviews confirmed that all the directors (5; 100%) interviewed noted that there was a shortage of qualified library personnel to provide effective library services in the rural areas. This included the issue of their training and re-training opportunities which was a serious constraint across the zone under study.

What these findings confirmed was that the issue of staffing was a major constraint that cut across all the libraries in the study area under study. Apart from non-recruitment of additional staff evidenced by the low numbers, there was also lack of adequate training and retraining of the existing staff. Hence, most of the branch libraries were managed by para-professional staff. Consequently, this scenario has adversely effected the provision of effective and innovative public library services that can meet the information needs of rural dwellers in the North-Western zone of Nigeria.

These findings are in agreement with those of Opara (2008:356) who observed that in Nigeria, public libraries ought to be headed by professionals but are instead headed by para-professionals or even non-professionals including the branch libraries in some local government areas. Abdulkarim (2010) also noted then that most public libraries in Nigeria lack adequate and professional staff needed to manage the affairs of the libraries effectively and efficiently.

This status quo was also confirmed by John-Okeke and Owoeye (2011:39) when they carried out an overview of public library services in Nigeria, which found that the libraries in the local government areas were headed by non-professional staff that lacked the necessary qualifications to operate the libraries. In this regard, Igiamoh and Ogunwemimo (2013) argued that unless public librarians are adequately and properly trained with the necessary skills and knowledge that will prepare them for the task ahead, they will never be efficient in discharging their individual responsibilities.

The findings of this study revealed that 78.4% of the heads of branch libraries confirmed that there was a lack of basic infrastructural facilities in most of the rural communities. Results from the interviews revealed that all of the directors (5; 100%) interviewed confirmed that in most of the rural communities this infrastructure was lacking. Egbe (2014) found that rural areas lack virtually all infrastructural and social amenities like roads, medical and health facilities, portable water, and electricity among others. This view was also shared by Ugwuanyi and Chukwuemeka (2013) and Anie (2014). Iwe (2003) observed then that the majority of rural areas in Nigeria lacked good access to roads, pipe-borne water, electricity and factories or industries.

More than half (55.8%) of the heads of branch libraries indicated that language was a barrier associated with the provision of public library services in the rural areas. Momodu (2012:95)

confirmed then that among the challenges encountered by rural libraries was the inadequacy of information sources in local languages. Momodu (2012:95) added that most of the library books are published in English when most of the rural dwellers cannot even read and write in their native languages.

The findings of this study confirmed the assertion that there were high illiteracy rates among the rural dwellers as observed by 66.7% of the heads of branch libraries. In this regard, Olanrewaju (1998) pointed out then that there is a need to reappraise the problem of illiteracy among rural communities as it largely affects the accessibility to and use of information by the majority of rural dwellers. Olarenwaju (1998) added that the need for an innovative approach in this direction is desirable so that information dissemination in rural areas could be dynamic rather than static.

These findings overall are consistent with those of Oni et al. (2014), Egbe (2014), Igwe et al. (2015) and Uzezi (2015) who found that in Nigeria the major challenges affecting the provision of public library services in rural areas include lack of information infrastructure, slow internet response, inadequate funding, inadequate personnel, language barriers, high illiteracy levels among rural dwellers, lack of good access roads, lack of electricity, lack of pipe-borne water, lack of industries, as well as lack of social amenities.

The findings are also consistent with those of Chinweet al. (2014:36) and Ejedafiru (2015:23) who observed that the provision of public library services in the rural areas in Nigeria is more or less affected by dispersed populations, poor transportation and communication systems, illiteracy, poor funding, language barriers, poverty, lack of physical and basic infrastructure, low patronage, lack of adequate and relevant information resources and services and absence of literacy programmes in the rural areas. Ejedafiru (2015) also noted that in Nigeria rural dwellers suffered from low levels of literacy which resulted in limited access to written records and electronic information, but the oral tradition predominates.

The findings also revealed that more than 60% of the heads of branch libraries indicated that there was a lack of awareness of the library services among most of the rural dwellers which led to lack of patronage of the services by the majority of the rural dwellers. These findings also agreed with those of Abu (2014) whose study on community development and rural public libraries in Malaysia and Australia that found that the majority of the rural dwellers in Malaysia were unaware of the existence of public library services. Similarly, Salman et al.

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(2017) found that the lack of awareness of the existence of certain library services and resources was found to be more dominant among the rural dwellers.

According to the current study's findings, the majority of public libraries in the area under study lacked written policies to guide issues relating to collection development (such as selection, acquisition and weeding), building structures and the kinds of information sources and services to be provided in terms of formats and languages for illiterate rural dwellers. This is a noted challenge generally in the provision of public library services in Nigeria. For example, Abdulkarim (2010) earlier noted that the majority of public libraries in Nigeria lacked well defined policies to guide their activities. Igwe and Onah (2013) cited in Igwe et al. (2015) noted and commented that the absence of relevant government policies for overall development of libraries and information services is one of the challenges affecting the provision of library and information services in contemporary Nigeria.

Generally, the findings of this study are consistent with those by Nwokocha (1998); Opara (2008); Folorunso and Folorunso (2010); Omotosho and Okiki (2012); Oyeronke (2012); Akinola et al. (2013); Salman et al. (2013); Annuneet al. (2014); Joy and Idowu (2014); Sambo et al. (2014); Mamman (2015); Agodi and Obasi (2016) and Adeleke (2017) who demonstrated that most public libraries in Nigeria are lagging behind in terms of development because of the many challenges which revolve around inadequate funding, inadequate accommodation and bad location, lack of public awareness, inadequate and outdated materials, lack of adequate and qualified staff, as well as inadequate training and retraining programmes for library staff. Other challenges included inadequate number of existing libraries, inappropriate policies, low level of patronage; irrelevant materials; poor perceptions of the institutions by the society; bureaucratic bottlenecks; inadequate skilled librarians in e-resource management, shortage of extension workers, language barriers, lack of motivation of library staff, lack of adequate facilities, as well as lack of effective internet /ICT services among others.

These challenges have largely affected the provision of public library services in the rural communities in Nigeria and they therefore need to be addressed for effective provision of public library services in the rural areas to meet the information needs of rural dwellers for sustainable rural development.

6.10 Suggested solutions to the identified challenges associated with the provision of public library services in the rural areas

In this section the suggestions by heads of branch libraries as regards solutions that could help in ameliorating the inadequacies faced by public libraries in the provision of information services in the rural areas are discussed. The suggested solutions include adequate funding, better resources and facilities, training for library staff, establishment of community information centers as an extension of library services, repackaging of information including translation services to overcome illiteracy and language barriers, better marketing of libraries and new approaches to rural service delivery by libraries.

The findings revealed that more than 90% of the heads of branch libraries suggested the provision of adequate funding and provision of adequate library facilities. Most (4; 80%) of the directors interviewed revealed that there was a need for partnership or collaboration between the state governments, local governments and NGOs in funding the libraries adequately. They also added that improved funding would enable the libraries to overcome all the other challenges facing the libraries in the provision of adequate and current information resources as well as effective services in the rural areas.

These findings are consistent with those of Iwe (2003), Ntui (2005), Opara (2008), Folorunso and Folorunso (2010) and Igiamoh and Ogunwemimo (2013) who suggested that the public library system in Nigeria needs proper funding through adequate budgetary allocations to support the library activities in terms of provision of resources (human and material) and effective services in the rural areas. Ape (2012) recommended adequate funding for the libraries to cater for the information needs of this category of people in the society. Mamman (2015) offered a similar recommendation that public libraries should be adequately funded by their respective state governments to provide effective information services. Adeleke (2017) also suggested adequate funding of public libraries for effective automation, provision of ICTs and other facilities.

Obinyan et al. (2011) noted and commented that in Nigeria for years, public libraries in rural areas have been associated with low patronage resulting from the inappropriateness of their collection for the information needs of their clienteles. In this regard, the findings of this study also showed that more than 90% of the heads of branch libraries suggested the provision of adequate and current information resources for the libraries to overcome their challenges. Not only that, but there should be frequent appraisal of the library resources and

services to ensure that they are relevant to the information needs of the library users (Oluwaseunfunmi 2015:10). Likewise, Adeyomoye (2011) suggested that public libraries should not neglect to diversify their methods of acquisition which should comprise direct purchases from vendors, soliciting gifts from individuals and organizations, as well as exchanges to provide adequate and current information resources. The LRCN's (2015) standards and guidelines for public libraries in Nigeria suggest that public libraries regardless of where they may be located, should acquire a range of resources in their collections both in print and non-print formats. Moodley (2013) is of the view that a high quality library collection should be provided coupled with internet access and outreach programmes. Concurring, Abu (2014) opines that collection development in rural public libraries should be locally-focused on the information needs of the local environment after consulting widely to determine those needs.

The findings of this study also revealed that more than 90% of the heads of branch libraries suggested the provision of training and retraining opportunities for the library staff. These findings agreed with Nwokocha (1998:101) who suggested then that public libraries like any other organization, need adequate and well trained, dedicated and experienced personnel to carry out the library services effectively and efficiently. Librarians should be trained on how to use the latest technologies and methods in disseminating information especially to young adults (Oluwaseunfunmi 2015:10). The quality of library staff should not be compromised in the provision of public library services in the rural communities. Eze (2012:1) adduced that the public libraries in the rural areas do not only need adequate, well-trained and dedicated staff, but the staffing should also comprise different skills sets in order to run the affairs of the libraries smoothly and efficiently. Oyeronke (2012:73) suggested that public library staff should be given opportunities to attend conferences, workshops, seminars, short-term training or even pursuing higher degrees.

The findings of this study also showed that more that 90% of the heads of branch libraries suggested that Community Information Resource Centers should be established in rural communities. This finding concurred with that of Maepa (2000) who emphasized that Community Information Centers should be established in rural villages for effective provision of information. Likewise, Kamba (2009) and Ejedafiru (2015) remarked that the existing gap between rural communities and urban centers can be bridged through the establishment of an Innovative Community Information Center in rural communities.

Based on the findings of this study, more than 90% of the heads of branch libraries believed that provision of adult literacy programmes for illiterate rural dwellers would help in addressing some of the challenges associated with the provision of public library services in the rural areas. The following suggestions would significantly help in addressing some of the challenges associated with provision of public library services in the rural areas. Harande (2009:4) suggested that government should introduce programmes that will eradicate illiteracy in rural communities. Olanrewaju (1998) suggested then that mass literacy activities through the provision of reading materials for children and illiterate adults coupled with organizing literacy classes to promote adult literacy in rural communities will make the information centers more effective.

The findings of this study revealed that more than 80% of the heads of branch libraries suggested the provision of information repackaging, provision of basic infrastructural facilities in the rural areas as well as provision of translation services. The provision of these would in no small measure address a lot of challenges associated with the provision of public library services in rural areas. Momodu (2012:95) suggested that there is need for supply of audio visual facilities in non-literate societies, translation of information from English to vernacular languages, and recording and transcribing oral traditions onto tape. Momodu (2012) further added that public libraries should also encourage exhibitions, lectures, adult literacy classes, plays and drama among others.

Similarly, these findings support those of other researchers. Omopupa (2006:13) advocated then that since rural communities are farming communities, information on how to improve their farms should be provided through information services such as repackaging, audio/visuals, mobile libraries, among others. Emmanuel (2012) suggested that public libraries should not ignore the provision of relevant information materials in local languages, particularly to rural farmers.Concurring, Amusan et al. (2012:221) also suggested that information repackaging, awareness campaigns, human resources development, mobile libraries and outreach services as well as capacity building could serve as strategies that public libraries can adopt to overcome their challenges particularly in the attainment of MDGs for education. Oni et al. (2014:66) further suggested that librarians should repackage information resources and services, and then tailor them to the relevant and appropriate languages and formats to meet the information needs of rural inhabitants.

The findings also showed that more than 80% of the heads of branch libraries believed that marketing and publicity of library services to rural dwellers would enable them to be aware of the existence of public library services. This would also enable public libraries to up skill the users on how to understand, use and share information. This finding was also shared by Fati and Yelwa (2015:2) who made a similar suggestion that to help provide the rural populace with valuable information, they need to be empowered on how to understand, use and share such information, for the purposes of problem-solving and better decision making.

The findings also showed that two (40%) of the directors interviewed indicated the need for a new approach to the provision of public library services in rural communities. This opinion was also shared by Nkabinde (1988) two decades ago in Botswana. Nkabinde (1988) recommended that rural libraries should not be built on the urban model, but rather should be based on a model suitable for rural dwellers. This would enable the evaluation of public library services on the basis of appropriateness; focusing on target groups, accessibility, affordability, participation and assertiveness. Similarly, Salman et al. (2017) revealed that about two third (219; 60.8%) of the respondents demonstrated an urgent need for improvement in the quality and quantity of the library services provided; about two thirds (219; 60.8%) of the respondents also suggested adequate funding of the libraries. Likewise, more than half (181; 50.3) of the respondents indicated a need for introducing new services and improving the quality and quantity of the library staff.

6.12 Summary

This chapter discussed and interpreted the findings presented in Chapter Five of the current study. The interpretation of the findings was based on the research questions, related themes from the literature review and key variables from the models reviewed in the theoretical framework. In the interpretation of the research findings, an attempt was made to situate them within empirical and theoretical literature with a view to demonstrating how the findings of the current study agree or disagree with previous studies. The findings of the current study showed that there were more males than females among both the heads of the branch libraries, directors of the state library boards and the library users. In addition the findings of the study showed that the ages of the heads of the branch libraries ranged between 25 and above 45 years while 54.9% of the heads of the branch libraries were above the age of 45 years. The findings showed that there were only three (5.9%) heads of the branch libraries that were between the ages of 25-30 years and three that were between the ages of 31-35

years. The directors of the state library boards shared a common age range of between 50 and 56 years. Among the age groupings of the library users, the findings revealed that the common age ranges of the library users were those from 18-27 years and those from 28-37 years. The findings showed that 115 (34.6%) of the library users were from within the age range of 18-27 years and 93 (28.0%) were from within the age range of 28-37 years. The findings showed that younger people among the heads of the branch libraries were few, while the majority of the library users were young people.

In terms of highest educational qualification, the findings of this study showed that more than half (33; 64.7%) of the heads of the branch libraries possessed a Diploma or NCE, while only five (9.8%) had a degree or HND. This indicated a lack of degrees among heads of branch libraries which is a cause for concern. Of the directors of the state library boards, the findings revealed that four out of five (80%) possessed a Bachelor's degree, while only one (20%) had a master's degree. Among the library users the findings showed that 93 (28.0%) and 108 (32.5%) of them had a Diploma/NCE and a Degree/HND respectively. But only six (1.8%) of the users had a master's degree. Therefore, the results showed that more than half (60.5%) of the library users were relatively well educated. With regard to occupation, the findings showed that 121 (36.4%) and 116 (34.9%) of the library users were students and civil servants respectively and these two groups formed the largest group of library users.

The research findings showed that rural dwellers with respect to the North-Western zone of Nigeria needed information in various spheres of life. The findings showed that the information needs of rural dwellers in the area under study were diverse and revolved around agriculture, health related issues, education, economy, government policies, culture and recreation and rural development.

With regards to agricultural information needs, the findings showed that rural dwellers needed information on various aspects of agriculture which include agricultural inputs (such as fertilizer, seeds, pesticides, vaccines, feeds, housing, and vitamins and minerals), farm implements (such as ploughs, harrows and cultivators), agricultural machinery (like thrashers, winnowers, and harvesters), farming techniques, agricultural loans and credit and marketing of agricultural products. The findings revealed that rural dwellers in the area under study also needed information on health related issues such as infectious diseases (like HIV/AIDS, TB, hepatitis, malaria, influenza and diarrhoea), maternal and child health care, routine immunization, nutrition, disease/epidemic outbreaks and environmental sanitation.

The findings also showed that rural dwellers in the area under study needed information to acquaint themselves with various government policies. They needed information on governance, elections and voters' registration, population census, rural development, afforestation, deforestation and skills acquisition. Likewise, the findings showed that information on economic activities was also needed by the rural dwellers concerning youth and women empowerment, micro-credit loans and finance, employment opportunities and business/entrepreneurial skills. This indicated that rural dwellers also attached importance to information on economic activities outside of agriculture which is vital for sustainable rural development.

With regards to information about education, the study revealed that information on education at all levels was needed by rural dwellers. The findings showed that rural dwellers needed information on tertiary and secondary education as well as UBE, adult education, girl-child education and nomadic education. Information surrounding culture and recreation were also needed by the rural dwellers. The findings revealed that rural dwellers needed information about cultural festivals, tourism, documentaries and entertainment. The results of this study also showed that rural dwellers needed information about rural development such as information on portable water, rural electricity and food security, mode of transportation, accessible roads and housing.

The findings of this study revealed that rural dwellers used various skills to identify, access and use information from public libraries and other sources. First and foremost, some rural dwellers identify, access and use information by visiting the existing public libraries to consult the various information sources available. This was followed by identifying, accessing and using information received on radio. Although the rural dwellers identify, access and use information by visiting the libraries, they also used a range of other skills and methods which involved both formal and informal sources such as contacting friends, neighbours, relatives, and other people during market days. Other skills were receiving information from town criers, television, contacts through cell phones, visiting viewing centers and health centers/dispensaries, receiving information from extension workers, gatekeepers, village heads, religious leaders, oral traditional healers, as well as from schools/adult centers.

The study revealed that the dominant information sources used by the rural dwellers to seek and satisfy their information needs from public libraries were printed materials. Other

information sources used by the rural dwellers to seek and satisfy their information needs from public libraries were posters and fliers and audio/visuals. With regards to information services provided to the rural dwellers, the findings showed that the dominant information services provided by public libraries to rural dwellers in the zone under study were traditional services such as reference services, circulation services, lending services, serials services and services for children. This was followed by awareness campaigns on government policies with a view to enhancing the living conditions of rural dwellers. However, the findings showed that the libraries under study did not provide adult literacy programmes, organize meetings, workshops, seminars, and exhibitions and translation services for rural dwellers.

Furthermore, the findings of this study revealed that public libraries in the area under study used various channels to disseminate information to rural dwellers. The dominant channels used in disseminating information to rural dwellers were printed materials. Other channels used included centralized library services at the local government headquarters, audio/visuals, posters and fliers. However, the findings revealed that the libraries did not use Community Information Resource Centers, ICTs, extension workers and town criers in disseminating information to rural dwellers.

Based on the findings, rural dwellers in the area under study faced a number of challenges in seeking and using information from public libraries. These challenges included absence of library services in rural communities, centralization of the library services at the local government headquarters, ineffective library services in rural communities, inadequate or inappropriate information resources and absence of community information resource centers in rural areas. Other challenges included poor telecommunication systems in the rural areas, language barriers, lack of qualified library personnel, lack of basic infrastructural facilities in most of the rural communities and economic constraints on the part of the rural dwellers. The challenges identified by library users were also identified by heads of branch libraries and the directors.

Information collected from heads of libraries and directors indicated that there were a number of challenges associated with the provision of public library services in rural areas. In other words, the findings showed that public libraries in the area under study were battling with a number of challenges in providing services to rural dwellers. These challenges included poor funding, inadequately trained manpower as well as inadequate information resources, absence of community information resource centers in rural communities, dilapidated library

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buildings and lack of basic infrastructural facilities in most of the rural communities. Other challenges included high illiteracy rates among the rural dwellers, inadequate staff training and retraining opportunities, lack of awareness of library services by the rural dwellers, lack of patronage of the library services by most of the rural dwellers and language barriers.

Based on these challenges the library users involved in the study suggested a number of solutions that could be used to address the identified challenges. These included establishment of Community Information Resource Centers in the rural communities, provision of adult literacy programmes for the illiterate rural dwellers, provision of basic infrastructural facilities in rural communities, marketing and publicity of library services to rural dwellers. Other suggested solutions included provision of training and retraining opportunities for library staff, provision of information repackaging service as well as provision of translation services. Their solutions generally coincided with those suggested by the heads of branch libraries and the directors of state library boards.

A number of solutions were also offered by the heads of branch libraries and directors of state library boards under study. These included adequate funding of the libraries, provision of adequate library facilities, provision of training and retraining opportunities for the library staff and establishing Community Information Resource Centers in the rural communities. Other solutions included provision of adult literacy programmes for illiterate rural dwellers, information repackaging, provision of basic infrastructural facilities in rural communities, marketing and publicity of library services to rural dwellers and provision of translation services. Chapter Seven concludes this study and provides recommendations that may contribute towards enhancing the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria.

CHAPTER SEVEN

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This study investigated the provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria. Understanding information needs of rural dwellers is crucial in the provision of public library services in the rural areas. Issues surrounding the provision of public library services in the rural areas as well as information needs of rural dwellers have been covered in the literature. Rural dwellers need information for the general development of themselves and their communities. Access to information is both a legitimate and fundamental human right (Mutula and Majinge 2016). The current study addressed the following research questions, with respect to the North-Western zone of Nigeria:

1. What are the information needs of the rural dwellers?
2. What skills do rural dwellers effectively use to identify, access and use information from public libraries?
3. What information sources and services are used by rural dwellers to seek and satisfy their information needs from public libraries?
4. What channels are used by the public libraries to disseminate information to the rural dwellers?
5. What challenges are faced by the rural dwellers in seeking and using information from public libraries?

The study was underpinned by the Aina's 2006 library-extension service linkage model, Wilson's 1981 model of information behaviour andpragmatic paradigm. A mixed methods approach was used to examine the pattern of provision of public library services to meet the information needs of rural dwellers. The target populations were five directors of state library boards, 52 heads of branch libraries as well as 10 574 library users in the North-Western zone of Nigeria. The sample size of the study comprised all the five directors, all 52 heads of branch libraries and a sample of 370 library users making a total of 427 participants. The empirical data were collected using questionnaires, semi-structured interviews and observation. The review of related literature in the current study covered both empirical and theoretical literature from scholarly journal articles, books, and chapters in books, theses, conference proceedings, websites and others. The quantitative data collected was analysed using SPSS software and descriptive statistics. The qualitative data collected was analysed

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using NVivo software, thematic and content analysis to generate descriptive analysis and relevant themes.

The chapter provides a summary of findings, conclusion and recommendations of the study. The chapter is divided into three core sections. The first section provides an introduction to the chapter which describes the purpose and research questions of the study. The second section provides a summary of the study, summary of the research findings and conclusion. The last section describes the contribution of the study to existing knowledge, as well as recommendations for matters that require attention, and suggests areas for further research and a final summary.

7.1 Summary of the research findings

The summary of the research findings in the current study were based on the key research questions addressed by the study.

Information needs of rural dwellers: The study found that rural dwellers in the area under study needed information in various spheres of life. For example, in the area of agriculture, rural dwellers needed information about inputs (fertilizer, seeds, pesticides, vaccines, feeds, housing, vitamins and minerals), farm implements (such as plough, harrow, and cultivators), agricultural machinery (thrasher, winnower, and harvester) and farming techniques. Others areas of agricultural information need of rural dwellers included agricultural loans and credits and marketing.

With regards to health related issues, the study found that rural dwellers needed information about infectious diseases (HIV/AIDS, TB hepatitis, malaria, influenza, diarrhoea), maternal and child health care, routine immunization and nutrition. Other health related information needed by rural dwellers as indicated by the two groups was information on family planning, disease/epidemic outbreaks and environmental sanitation.The study also found that rural dwellers needed information about economic related issues such as micro-credit loans and finance, business/entrepreneurial skills,youth and women empowerment as well as about employment opportunities.

Furthermore, the study found that rural dwellers needed information about government policies particularly in the areas of governance, election and voters' registration and population census. Other areas as confirmed by most of the heads of branch libraries and

library users respectively were information on afforestation, skills acquisition as well as government programmes on rural development.

Information about education at different levels was also needed by rural dwellers. The study found that rural dwellers needed information about tertiary and secondary education. Other areas of educational information needs as noted by the majority of the heads of branch libraries and library users respectively were UBE and nomadic education. Similarly, more than 80% of the heads of branch libraries and more than 70% of the library users confirmed that rural dwellers needed information about adult education and girl-child education respectively.

For culture and recreation, the study found that most of the heads of branch libraries and library users respectively indicated that rural dwellers needed information about cultural festivals, tourism, documentaries as well as entertainment. Rural development was also another area of information needed by rural dwellers. The study found that the majority of heads of branch libraries and library users respectively agreed that rural dwellers needed information relating to portable water, rural electricity, mode of transport, accessible roads as well as housing.

The overall results showed that rural dwellers needed information on a wide range of topics relevant to their daily lives and existence namely agriculture, education, economy, government policies, health related issues, culture and recreation and rural development for sustainable rural development. Public libraries are expected to provide relevant and effective information resources and services to meet those information needs. The information needs of rural dwellers must be identified, and the right information must be made available, accessible, as well as utilized in order to achieve the desired results (Odefadehan, Akinola and Odefadehan 2016).

Skills used by rural dwellers to identify, access and use information from public libraries and other sources: The overall results of this study revealed that rural dwellers used a variety of ways and skills to find information inclusive of people and various forms of public media. Eighteen categories of skills/ways of identifying, accessing and using information were identified showing that a range of skills and ways were needed to meet information needs. Ten out of the 18 categories of skills / ways listed involved contact with people whilst four involved using physical facilities such as libraries, indicating the

importance of face to face communication. Ellis's (1989) behavioural model suggests that when an information user decides to undertake information searching, s/he will employ a number of strategies to begin the search, for example by asking some knowledgeable colleagues which is the initial activity undertaken when seeking information on a particular topic.

The most popular way used by rural dwellers to identify, access and use information was by visiting public libraries to consult the information sources available. Most of the library users as rural dwellers however, revealed that they also used other skills and methods to identify, access and use information from informal sources such as contacting friends, neighbours, relatives, and other people during market days, town criers, extension workers, gatekeepers, village heads, religious leaders, oral traditional healers as well as contacts through cell phones. Among the formal sources used by rural dwellers was receiving information on radio and television, visiting viewing centers and health centers/dispensaries, as well as receiving information from schools/adult centers.

What the study found was that rural dwellers did not solely rely on public libraries in identifying, accessing and using information, but also relied on other formal and informal information sources to identify, access and use the information they needed for sustainable rural development. This impliedly showed that public libraries did not meet all information needs and are expected to incorporate other channels of disseminating information to rural dwellers particularly the oral sources which are largely used by rural dwellers. This is to ensure that rural dwellers enjoy their right to have access to information. It is a basic right of every citizen to have access to information (Idiegbeyan-Ose et al. 2015).

Information sources and services used by rural dwellers to seek and satisfy their information needs from public libraries: This section is a summary of the findings about the information sources and services used by rural dwellers to seek and satisfy their information needs from public libraries in the North-Western zone of Nigeria.

Information sources: The study found that the most frequently used information sources by rural dwellers from public libraries were printed materials (such as books, journals, newspapers and magazines). These information sources were the frequently used sources by rural dwellers in order to seek and satisfy their information needs from public libraries. What this indicated was that the majority of people who patronized the libraries were the literate

people among the rural dwellers. Other information sources used by rural dwellers from the libraries as confirmed by most of the library users were posters and fliers and audio/visuals. Most libraries did not have access to online information.

All the directors (5; 100%) interviewed confirmed that printed materials (such as books, newspapers, magazines and journals) were the major information sources available in the libraries for rural dwellers. But two (40%) directors acknowledged that other information sources such as posters, radio, television and other audio/visuals were also available.

However, the study did not find that other sources like Community Information Resource Centers, viewing centers, town criers, extension workers, gatekeepers, ICTs (such as computers and internet facilities) were used by rural dwellers from the libraries. This indicated that public libraries in the area under study did not provide oral information sources and other formal places for the provision of information services in rural communities. Leckie's et al. 1996 general model of information seeking of professionals demonstrates that the eventual success or failure of an information seeking event is determined by information sources and channels available, as well as the individual's awareness about these sources and their usefulness (Kerins et al. 2004).

Adequacy of the information sources: Most of the heads of branch libraries indicated that the information sources available in the libraries were adequate, relevant and current. However, in sections 7.3.6 and 7.3.7 respectively, the findings indicated that among the major challenges faced in the provision and utilization of public library services in the rural areas were inadequate and outdated information resources. These challenges were basically attributed to poor funding of the libraries from authorities concerned. Similarly, the findings indicated that the poor funding of the libraries had been the cause of all the adequacies facing the libraries. (For details see section 7.3.6 and 7.3.7).

Information services: The study found that the dominant information services provided by public library services in the North-Western zone of Nigeria were traditional services such as reference services, circulation services, lending services, serials services, and services for children, as well as awareness campaigns on government policies as information services. These were confirmed by the majority of heads of branch libraries respectively. However, based on the responses of the heads of branch libraries, the study found that the libraries under study did not provide adult literacy programmes, organize meetings, workshops,

seminars, and exhibitions as well as translation services to rural dwellers in the area under study.

Similarly, all the directors (5; 100%) interviewed unanimously agreed that the dominant library services provided in the branch libraries were traditional library services as was acknowledged by the heads of the branch libraries. But two (40%) directors acknowledged the provision of other services such as organizing seminars and workshops, debates and competitions, adult literacy programmes and extension services in their branch libraries. Enhanced rural library programmes facilitate the provision of effective information services which also ensure access to adequate and relevant information that will improve the political, economic, educational, cultural and recreational development of any society (Harande 2009:5; Folashade 2014:119).

Impact of information services on lives of rural dwellers: Based on the opinions of the library users, the study found that the information services provided by the libraries had impacted on their lives as rural dwellers in various ways. The main impact was felt in their educational lives as indicated by the library users. This was followed by increased awareness about government policies and programmes, increased knowledge on health related issues, economy, wellbeing. Other impacts made by the library services as indicated by most of the library users were on skills acquisition, improved farming activities, adult literacy levels as well as improved cultural and recreational activities.

These opinions as expressed by the library users were not surprising, because the majority of the library users who patronized the library services were the literate people among the rural dwellers in question as shown in the preceding sections. In addition, based on the findings of this study, the majority of illiterate rural dwellers were not even aware of the library services which consequently led to a lack of patronage of the library services by most of rural dwellers as revealed in sections 7.3.6 and 7.3.7 respectively. The study confirmed that the information services provided by the libraries under study did not match the profile of illiterate rural dwellers which were attributed to a number of challenges facing the libraries.

Availability of library equipment/facilities: The study found that public libraries in the area under study lacked the basic equipment needed for the provision of effective information services in rural areas. The study found that the libraries had no vehicles or vans as confirmed by the heads of branch libraries. This lack of mobility adversely affected the provision of the

services to rural villages in terms of mobile libraries. But the heads of branch libraries confirmed the availability of good furniture for readers. However, heads of branch libraries revealed that most of the libraries were lacking proto-type buildings as well as ICT facilities.

Library equipment/facilities are essential in the provision of public library services in rural areas. In other words, they facilitate effective provision of information services in rural communities. Vehicles/vans are needed by the libraries to provide mobile services in areas where there are no physical libraries. Library buildings are the structures that accommodate the information resources, library users and the staff for effective provision and utilization of the library services. Similarly, ICTs are facilities through which vast information resources can be provided at reduced costs.

Availability of rural infrastructural facilities: As regards rural infrastructural facilities, which are also essential in the provision and accessibility of information services in the rural areas, the majority of heads of branch libraries and library users indicated the availability of electricity power supply, effective telecommunication systems, good transport systems, and good road networks/accessible roads. Other rural infrastructural facilities available as indicated by most of the library users were good health services, educational infrastructural facilities as well as portable water. On the other hand, the study found that lack of infrastructural facilities in most of the rural areas was one of the major challenges faced in the provision and utilization of public library services in the rural areas (for details see section 7.3.7).

In Nigeria, rural areas lack virtually all infrastructural and social amenities like roads, medical and health facilities, potable water, and electricity among others (Egbe 2014). Rural infrastructural facilities are also essential in the provision and utilization of public library services in rural areas. For example, good road networks and other transport systems enable the libraries to easily reach out to rural communities with the services. Electricity and effective telecommunication systems are also needed for the use of ICTs and other audio/visual facilities in the libraries. Likewise, water is also needed for utility and maintenance of the libraries.

Channels used by public libraries to disseminate information to rural dwellers: The study found that printed materials were the major channels through which public libraries disseminated information to rural dwellers in the North-Western zone of Nigeria. This was

confirmed by 48 (94.1%) heads of branch libraries. The centralized library services at the local government headquarters were also used by the libraries to disseminate information to rural dwellers as indicated by the heads of the branch libraries. Other channels through which public libraries disseminated information to rural dwellers were audio/visuals as well as posters and fliers.

However, the study found that public libraries in the North-Western zone of Nigeria did not use Community Information Resource Centers, ICTs, extension workers and town criers in disseminating information to rural dwellers. For example, Community Information Resource Centers can be avenues for documenting indigenous knowledge and culture, learning resource centers for mass literacy, adult and non-formal education programmes (Anie 2014).

Challenges faced by rural dwellers in seeking and using information from public libraries: The study found that centralization of library services at the local government headquarters was the main challenge faced by the rural dwellers in seeking and using information from public libraries in the area under study. This was confirmed by the library users. A typical rural dweller had to travel a distance from his/her rural community to the local government headquarters to seek and use information from a public library. Closely related, were the absence of library services in rural communities as indicated by most of the library users, ineffective library services in rural communities, inadequate or inappropriate information resources, absence of Community Information Resource Centers in rural areas. Other challenges identified by most of the library users included language barrier which is generally but not exclusively associated with the literacy levels of the rural dwellers, lack of qualified library personnel, lack of basic infrastructural facilities in rural communities as well as economic constraints and poor telecommunication systems.

The study found that rural dwellers faced a number of challenges in seeking and using information from public libraries which were responsible for the low patronage of the library services by the majority of rural dwellers particular the illiterate. In addition, the findings showed that provision of public library services was poor and nearly non-existent in rural communities. Wilson's 1981 second modelof information seeking behaviour suggests that the information user is likely to encounter some barriers while seeking information to satisfy his/her basic needs (Wilson 1999:252). These barriers could be personal, interpersonal or environment related.

7.2 Conclusion

From the findings of this study, it can be concluded that the areas of information needs of rural dwellers in the area under study revolved around agriculture, health, education, economy, culture and recreation, government policies as well rural development. The study found that rural dwellers used a variety of ways and skills to identify, access and use information inclusive of people and various forms of public media. The findings revealed that rural dwellers used a number of information sources to seek and satisfy their information needs from the libraries. Printed materials top the information sources used by rural dwellers from libraries. These were followed by audio/visuals, radio, television, posters and fliers.

The main information services provided by the public libraries to rural dwellers were traditional library services (such as reference, circulation, lending and services for the children). The study found that public libraries in the area under study used various channels in disseminating information to rural dwellers. These included printed materials, centralized library services at the local government headquarters, audio/visuals, posters and fliers. Among the challenges faced by rural dwellers in seeking and using information from public libraries was centralization of the library services at the local government headquarters, inadequate information resources as well as lack of community information resource centers in rural communities.

7.3 Answers to assumptions of the study

1. As assumed, the study found that provision of public library services to rural dwellers in the North-Western zone ofNigeria was different from those of other zones of the country and the entire African continent as reported in most of the literature reviewed. The study found that provision of public library services in the rural areas in the North-Western zone of Nigeria was poor to nearly non-existent. First and foremost the libraries were centralized at the local government headquarters without having the necessary facilities to extend the services to rural villages. There was also absence of Community Information Resource Centers and viewing centers in rural communities.

2. Similarly, as assumed, the study found that provision of public library services provision to rural dwellers in the North-Western zone of Nigeria was ineffective andinsufficient to meet the information needs of the rural dwellers. The study found that the nature of information resources and services provided for rural communities

was not different from those provided to urban dwellers. This is despite the fact that the majority of the rural population is illiterate who cannot read or write even in the native languages and their needs are somewhat different. In essence there was no uniqueness and in the provision of the information resources and services to rural dwellers to accommodate their specific needs.

3. As assumed, the study found that the laws and policies establishing the libraries were long overdue. Some of these laws were inherited from now defunct states. Most of these laws have been in operation since the 1970s and 1990s; the latest was the one passed in 2008 in one state. With this scenario, the study found that many emerging issues have not been captured by the laws, for example, the issues of rural library automation and the application of other ICTs on rural library services. Other issues like adult literacy programmes to enhance the literacy levels of rural dwellers, organizing lectures, meetings, seminars and workshops for rural dwellers need were not backed with effective laws or policies.

7.4 Recommendations

Based on the research findings, reviewed literature, models of information seeking behaviour and Aina's 2006 library-extension service linkage the study recommends the following aspects: regular needs assessment; inclusion of both oral and written sources; adequate, relevant and current information sources; channels of information dissemination to rural dwellers; adequate funding of the libraries; provision of effective rural library policies; staff development; provision of suitable library buildings and recommended approach to be adopted by public libraries.

Regular needs assessment: The findings of this study indicated that rural dwellers in the North-Western zone of Nigeria need information in all spheres of life. Therefore, there is a need for regular needs assessments of rural dwellers in the zone. This will enable the libraries to articulate the dynamic information needs of rural communities so as to provide relevant and effective information sources and services that can meet those needs. Without the identification of the information needs, public libraries cannot achieve their objectives of meeting the information needs of rural dwellers for sustainable rural development.

Inclusion of both oral and written sources: The study found that rural dwellers in the area under study used various skills to identify, access and use information. These skills involved

the use of formal and informal information sources, as well as written and oral information sources. However, the study found that none of the libraries under study provided oral information sources to rural dwellers. Therefore, it is recommended that public libraries should incorporate both written and oral information sources in the provision of information services to rural dwellers. Sources such as town criers, extension workers and gatekeepers should be used by the libraries in disseminating information to rural dwellers. Similarly, formal places such as Community Information Resource Centers and viewing centers equipped with ICTs and other audio/visual facilitiesshould be provided in rural communities. This will enable public libraries to reach out to rural dwellers at their door step with innovative services. In addition, the libraries should introduce adult and information literacy programmes to enhance the skills of rural dwellers in accessing and using information.

Adequate, relevant and current information sources: The study found that the information sources available in the libraries for the use of rural dwellers were mostly printed materials, posters and fliers as well as audio/visual facilities. However, these information sources were grossly inadequate and outdated due to poor funding of the libraries. Therefore, there is a need for the provision of adequate, relevant and current information sources including oral information sources in the branch libraries to meet the information needs of rural dwellers. Not only should that but they should also be in formats and languages best understood by the rural dwellers.

As regards the information services, the study found that only two were provided by the libraries. These included traditional library services (such as reference, lending, circulation and services for children) and awareness campaigns on government policies. Based on the profiles of rural dwellers the majority of whom were illiterates, the library services should be innovative and unique. Services such as organizing meetings, lectures, seminars/workshops, translation services, information repackaging, mobile library services as well as adult and information literacy programmes should be provided to people living in remote rural villages.

Channels of information dissemination to rural dwellers: The study found that the main channels used by public libraries in the area under study to disseminate information to rural dwellers were printed materials, posters and fliers, as well as audio/visuals. Rural dwellers are accustomed to the oral traditions and can better share the information exchanged in that way (Etebu 2009). Therefore, there is a need for public libraries to integrate oral information sources such as town criers, extension agents and gatekeepers in disseminating information to

rural dwellers. Similarly, Community Information Resource Centers and Viewing Centers with effective ICTs and other audio visual facilities should be established for the extension of the services in rural villages.

Adequate funding of the libraries: The most outstanding challenge hampering the provision of effective public library services in rural areas was poor funding of the libraries. This was the fundamental challenge that caused all other challenges facing the libraries. Therefore, the current study recommends that adequate funding should be provided to the libraries. Public libraries should be adequately funded by their respective state governments to provide effective information services (Mamman 2015). Alternatively, the laws establishing the libraries should be so that all the three tiers of government (federal, states and local governments) can jointly fund public library services in rural areas. The laws/policies should specify what each level should be responsible for in terms of library buildings/equipment, library staffing, information resources and facilities.

Provision of effective rural library policies: The libraries under study lacked written policies to guide the provision of effective public library services in rural areas. The majority of public libraries in Nigeria lacked well defined policies to guide their activities (Abdulkarim 2010). Consequently, the absence of relevant government policies for overall development of libraries and information services is one of the challenges affecting the provision of library and information services in contemporary Nigeria (Igwe and Onah 2013 cited in Igweet al. 2015). The current study found that there was no difference between the rural areas and urban areas in terms of the information sources and services provided. The majority of rural dwellers are illiterate farmers who cannot read or write in any language (Aina 2006). Therefore, effective policies should be put in place to guide the provision of public library services in rural communities for sustainable rural development.

Staff development: The study found that public libraries in the area under study were faced with the challenge of inadequately trained personnel. The findings indicated that the majority of the heads of branch libraries who were managing the libraries in the local government areas were para-professionals who lacked a minimum of a Bachelor's degree. This lack of degrees among the heads of branch libraries is a major concern as far as the provision of effective information services in the rural areas is concerned. Public libraries like any other organization, need adequate and well trained, dedicated and experienced personnel to carry out the library services effectively and efficiently (Nwokocha 1998:101). In this regard,

adequate and well-trained staff should be recruited and the existing ones should be given special training and retraining to work in rural areas, through academic programmes, conferences, workshops, seminars and other induction trainings.

Provision of suitable library buildings: The study found that a number of thebranch libraries in the local government areas were occupying converted properties mostly rented or donated. Most of these library buildings are dilapidated and forlorn (Opara 2008:354). Similarly, a number of local governments in the area under study did not have branch libraries at all due to lack of building structures. Therefore, there is a need for proto-type buildings for all the libraries in the local government areas. The existing ones which are dilapidated should be well renovated and equipped with the necessary facilities that will enhance the provision of effective library services in the rural areas.The findings of this study suggested the need for a new approach/model that could be adopted by public libraries to provide effective services that can meet the information needs of the rural dwellers in the North-Western zone of Nigeria.

Recommended approach: From the findings of the current study, it was apparent that the provision of public library services in the rural areas in the North-Western zone of Nigeria was very poor and nearly non-existent. The findings confirmed that the library services were centralized in the local government headquarters and not where the rural dwellers live. The libraries and Community Information Resource Centers were totally absent in rural communities. It also appeared that all the libraries under study lacked mobile library services to reach out people in the remote villages. This showed and was confirmed by the participants in the study that rural dwellers had to travel a distance to access the library services in the local government headquarters.

Ejedafiru (2015) suggested that the existing gap between rural communities and urban centers can only be bridged through the establishment of Innovative Community Information Centers in rural communities. Aina (2006) and Kamba (2009) noted then that the kind of information sources and services provided by the libraries do not match the African local environments due to high levels of illiteracy among rural dwellers. This has resulted in a lack of awareness of the library services and poor patronage of the library services by the rural dwellers.

From the foregoing therefore, it can be deduced that there is a need for a new approach in the provision of public library services to meet the information needs of the rural dwellers. In line with this, the current study recommends the adoption of Aina's 2006 model of Library-

Extension Service Linkage with some modifications to public libraries in the area under study. The adoption of this model is one of major contributions of the current study in the library practice. The model is recommended by this study because rural farmers share common characteristics with other rural dwellers in terms of information needs, literacy levels and to some extent the locality. Therefore, Aina's 2006 model can be adapted to cover other rural dwellers apart from the rural farmers as demonstrated in Figure 7.4.9 below.

Figure 7.4: Public library-extension service linkage model to meet the information needs of rural dwellers
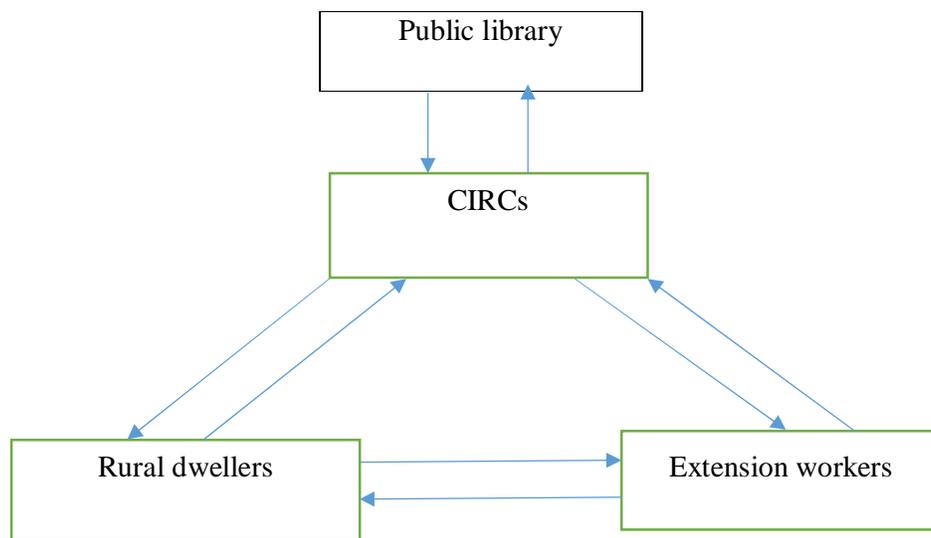
(**Source:** Aina 2006)

Figure 7.4 above shows that extension workers can disseminate information directly to rural dwellers and CIRCs. At the same time rural dwellers will also be able to bring their information needs to the CIRCs and extension workers. In this regard, Aina' 2006 model will be adequate in the provision of public library services that can effectively meet the information needs of rural dwellers in the North-Western zone of Nigeria. The model will be helpful to the libraries in the following ways:

*Establishing linkage:*The triangular linkage between farmers, extension agencies and public libraries as demonstrated in the model can be adopted in identifying the information needs of rural dwellers on regular basis. The linkage will also facilitate the inclusion of oral information sources in disseminating information to rural dwellers. Hence, the linkage will serve as an effective channel in disseminating information to rural dwellers.

Identification of gatekeepers: Aina's 2006 model suggests that in a rural setting, a public library and extension agents will identify gatekeepers who are living with the rural farmers. The gatekeepers will be the first point of contact for the farmers when they experience problems relating to their farming activiteis (Aina 2006). The library will then supply the gatekeepers with agricultural information for the farmers on a regular basis. The adoption of this in the provision of public library services to rural dwellers will help amelioration most of the challenges faced rural dwellers when seeking and using information from public libraries.

Establishment of Community Information Resource Centers: The model suggests the establishment of CIRCs in rural communities that will provide information to rural farmers. With the establishment such centers public libraries can extend their services to rural dwellers. The findings of this study showed that CIRCs were lacking inthe rural communities. Through the establishment of these centers in rural communities, public libraries can provide all kinds of information sourcesand services relevant to the information needs of the rural dwellers.

Information materials: The model suggests the CIRCs when established in the rural communities will collect information materials in forms of audio and video-cassettes/DVDs, audio and video-record players, films, projectors, posters and leaflets on agriculture and will make them available to illiterate rural dwellers.The findings of the current study showed that the information resources available in the libraries under study were predominatly printed materials which are not appropriate to illiteraterural dwellers. In this regard, the adoption of Aina's 2006 model will be helpfulto public libraries in providing the appropriate information sources for such category of rural dwellers.

Information repackaging: Aina's 2006 model suggests that public libraries are expected to redesign and repackage their information sources and services and tailor them to languages and formats accessible to rural farmers.The adoption of this model will significantly help the public libraries in the area under study to redesign and repackage their information sources and services and tailor them to languages and formats accessible to the illiterate rural dwellers.Oni et al. (2014:66) buttressed that public libraries are expected to repackage and tailor their information materials to meet the information needs of rural inhabitants in a language and format that they understand.

Furthermore, the CIRCs when established in the rural communities should have guiding principles that will make them innovative in the provision of public library services in rural

communities. In this regard, Kamba (2009) proposed some guiding principle within which governments at various levels in Africa can promote information as a tool and agent in achieving sustainable development in the rural areas. These guiding principles should equally be adopted to guide the CIRCs to be established in rural Nigerian communities as recommended. These guiding principles are (Kamba 2009:7)

i. The CIRCs should create awareness regarding the importance of public library services to rural dwellers through village heads and community leaders;

ii. The CIRCs should be organizing public lectures at social gathering such as on market days, at hospitals;

iii. The centers should reawaken the role of oral tradition in rural communities to be integrated with digital technologies for enhancement;

iv. The centers should be organizing shows on various subjects at public gatherings for education and entertainment;

v. The CIRCs should create viewing centers for public enlightenment, education and entertainment;

vi. The CIRCs should be organizing cultural festivals, communal functions and meetings;

vii. The centers should deploy extension information workers and gatekeepers to various rural communities;

viii. Town criers should be employed by the centers for announcements through public address systems;

ix. Public libraries should work and partner with higher educational institutions to mount special training in their curricular for rural librarians; and

x. The CIRCs should establish rural community networks, resources and cultural sharing.

The CIRCs are expected to be innovative in the provision of rural information services thereby making the pattern unique to the information needs of the rural dwellers.

7.5 Contribution of the study

This study contributes to knowledge in the field of library and information science. Specifically, the study contributes to knowledge regarding the provision of public library services to meet the information needs of rural dwellers for sustainable rural development.

The findings of the current study would be found relevant to policy-makers, heads of branch libraries in the local government areas, library users, researchers and rural dwellers.

Implication of the study for theory: The study recommends the adoption of Aina's 2006 Library-Extension Service Linkage model as a new approach that would guide and enhance the provision of public library services to meet the information needs of rural dwellers in the area under study. Wilson's 1981 model of information behaviour and Aina's 2006 Library-Extension Service Linkage model underpinned this study and will enable libraries to understand the information seeking behaviour of their users so that relevant information sources and effective services can be provided to them. Other models of information seeking behaviour discussed would also help in understanding the skills used by rural dwellers in identifying, accessing and using information. This would enable the libraries to use the right channels in disseminating information to rural dwellers.

Implication of the study for policy: The policy-makers and other stakeholders in the provision of public library services in rural communities would find this study relevant. The study would guide the policy-makers in formulating effective policies for the provision of public library services that can meet the information needs of rural dwellers for sustainable rural development. In other words, the study would serve as a tool to authorities of public libraries in the North-Western zone of Nigeria in particular, and Nigeria in general, towards introducing a policy framework that will revitalize the provision of public library services to rural dwellers for sustainable rural development.

Implication of the study for practice: The findings of this study would also create the awareness of the information needs of rural dwellers to stakeholders in the provision of public library services in rural areas. The identification of the information needs of rural dwellers is a key to the provision of effective information services in rural areas. This would also enable the stakeholders to provide the relevant information sources and effective information services that can meet those needs. In other words, stakeholders in the provision of public library services in rural areas would be able to introduce innovative and unique information services that can meet the information needs of rural dwellers.

Implication of the study for society: This study would also serve as a tool in marketing and publicising public library services that would enable the society to appreciate the importance of public libraries towards meeting their information needs. The public would be aware of the existence of public libraries as well as the various information sources and services they

provide to rural communities. The findings would enable rural dwellers to know what is due to them regarding the provision of public library services. Consequently, these would significantly enhance the provision and utilization of public library services for sustainable rural development in the North-Western zone and Nigeria in general.

7.6 Suggestions for further research

Rural communities in Nigeria constitute the largest population of not less than 70% of the entire population of the country. The rural communities consist of people with different occupations, genders and literacy levels. Further research on the provision of public library services should be extended to cover specific groups of individuals in the rural areas such as women, children, students, civil servants, nomads as well as illiterate people.

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APPENDICES

APPENDIX I: Interview schedule/guide for directors of the public library boards
Demographic information on the participants:

Gender:

Male   [   ]   Female   [   ]

Age category

Under-25 [   ] 31-35 [   ] 36-40 [   ] 41-45 [   ] 46-50 [   ] Above-50 [   ]

Qualification: --

State Library Board: _____

Length of time in current job --

1. **Which of these laws/policy established the Library?**

   - Act
   - Edict
   - . Decree
   - . Policy
   - Others please specify…………………………….

2. **How does the law/policy cover the following areas?**
   - . Funding
   - . Library buildings
   - . Staffing
   - . Information resources
   - .Information services
   - . Library facilities and equipment
   - Others, please specify……………………………….

3. **What information sources are available for rural dwellers?**
   - Printed materials (e.g. books, newspapers, magazines)
   - Radio
   - Television
   - Films
   - Audio/visuals
   - Posters
   - Others, please specify……………………………………………….

4. **Which of these types of Information Services Are Provided to Rural dwellers?**
   - Traditional library services (reference, circulation, serial, children, etc.)

- Information repackaging
- Translation services
- Mobile services
- Adult literacy programmes
- Organizing meetings/seminars/workshops
- Providing forum for group discussion
- Others please specify…………………………………………………………

5. **What challenges affect the provision of public library services in rural areas?**
   - . Poor funding
   - . Inadequate information resources
   - . High illiteracy rate among rural dwellers
   - . Inadequate facilities (vehicles/vans, ICTs, etc.) for information services provision
   - . Inadequate trained manpower
   - . Lack of basic infrastructural facilities (roads, electricity, telecommunication, water supply etc.) in the rural areas
   - .Dilapidated library buildings
   - . Absence of community information resources centres in the rural areas
   - Others, please specify……………………………………………………….

6. **How can/are the challenges be addressed?**

. Provision of adequate funds by the government and other NGOs

. Provision of adequate information resources

. Provision of Adult literacy programmes

. Provision of adequate facilities (vehicles/vans, ICTs, etc.) for information services provision

. Provision of basic infrastructural facilities (roads, electricity, telecommunication, water supply etc.) in the rural areas

. Provision of training and retraining opportunities to library staff

. Establishing community Information centres in the rural areas

. Designing a new library approach/pattern/model suitable for rural areas

Others, please specify…………………………………………………………………..

Thank you,

Badamasi Babangida, Mohammed

APPENDIX II: Questionnaire for heads of public libraries in local government areas

This questionnaire is meant for heads of public libraries in local government areas. Thank you for agreeing to participate in this survey for the completion of the questionnaire of a PhD study on 'Provision of public library services to meet the information needs ofrural dwellers in the north-western zone of Nigeria'. All information provided will be used only for academic purpose and will be kept anonymous and confidential. It will take you approximately 15 minutes to complete the questionnaire.

A. Demographic Information on the Respondents

1. Gender:

Please indicate your gender

    A. Male   [   ]

    B. Female   [   ]

2**.** Age:

 Please indicate your age range

    A. 25-30   [   ]

    B. 31-35   [   ]

    C. 36-40   [   ]

    D. 41-45   [   ]

    E. 46- Above   [   ]

3. Educational Qualification:

Please indicate your educational qualifications

    A. 'O' Level   [   ]

    B. Certificate   [   ]

    C. Diploma/NCE [   ]

    D. Degree/HND   [   ]

    E. Masters   [   ]

    F. Ph. D   [   ]

    G. Others, please specify……………………………………………………………

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

N.B.: SA=Strongly Agree SD=Strongly DisagreeD=Disagree UD=Undecided

B. Who are the users of your library?

Items	SA	A	SD	D	UD
1. Students					
2. Farmers					
• Subsistence farmers					
• large scale farmers					
3. Artisans					
4. Civil servants					

5. Literate people					
6. Non-literate people					
7. People living in terrain areas					
8. Adults					
9. Children					
10. Housewives					
11. Unemployed					
12. Others, please specify……………………………………………………..					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

C. What are the areas of information needs of your users as rural dwellers:

	SA	A	SD	D	UD
1. Agricultural information • Inputs (fertiliser, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals) • Farm implements (plough, harrow, cultivators) • Tractors • Machineries (thrasher, winnower, harvester) • Farming techniques • Agricultural loans and credits • Marketing • Others, please specify……………………………………..					
1. Health information • Infectious disease (HIV/AIDS, TB, hepatitis, malaria, influenza, diarrhoea) • Maternal and child health care • Routine immunization • Nutrition • Family planning • Disease/epidemic outbreaks • Environmental sanitation • Others, please specify……………………………………					
2. Government policies • Governance • Elections and voters' registration • Population census • Afforestation • Deforestation • Skills acquisition • Government programmes (rural development) • Others, please specify……………………………………					

3. Economy
   • Micro-credit loans and finance
   • Business/entrepreneurial skills
   • Youth and women empowerment
   • Employment opportunities
   • Others, please specify………………………………………					

4. Education
   • Tertiary education
   • Secondary education
   • Universal basic education (UBE)
   • Adult education
   • Girl-child education
   • Nomadic education
   • Others, please specify……………………………………..					

5. Culture and recreation
   • Cultural festivals
   • Tourism
   • Documentaries
   • Entertainments
   • Others, please specify………………………………………					

6. Rural development
   • Portable water
   • Rural electricity
   • Food security
   • Mode of transport (bus, car, vans, lorries, motorcycle, bicycle,
   • Accessible road
   • Housing
   • Others, please specify…………………………………….					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

D.Does your library provide these Services to rural dwellers?

	SA	A	SD	D	UD
1. Traditional services (reference services, circulation services, lending services, serial services, children services, etc.)					
2. Mobile library services					
3. Information repackaging					
4. Awareness campaigns on government policies					
5. Translation services					
6. Organizing meetings, workshops, seminars, and exhibitions for rural dwellers to enhance their living condition					
7. Adult literacy programmes					

	SA	A	SD	D	UD
8. Others, please specify……………………………………………………					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

E. What channels does your library use in disseminating information to rural dwellers?

	SA	A	SD	D	UD
1. Printed materials					
2. Centralized library services at the local government headquarters'					
3. Community information resource centres					
4. Gatekeepers					
5. Extension workers					
6. use of ICTs					
7. Town criers					
8. Audio/visuals					
9. Posters and fliers					
10. Others, please specify………………………………………………					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

F. How adequate and qualitative are the information resources in your library to the needs of rural dwellers?

	SA	A	SD	D	UD
1. The library has adequate information resources					
2. The library has relevant information resources					
3. The library has current information resources					
4. Others, please specify………………………………………………					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

G. Are these facilities available in your library?

	SA	A	SD	D	UD
1. Vehicles/vans					
2. Good reading furniture					
3. Pro-type library building					
4. ICT facilities					
5. None of the above					
6. Others, please specify………………………………………………					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

H. Are these infrastructural facilities available in your rural areas?

	SA	A	SD	D	UD
1. Electricity power supply					

	SA	A	SD	D	UD
2. Effective telecommunication system					
3. Good road networks					
4. Good transport system					
5. None of the above					
6. Others, please specify……………………………………………………..					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

1. What challenges are associated with the provision public library services in rural areas?

	SA	A	SD	D	UD
1. Poor funding of the libraries					
2. Inadequate information resources					
3. Absence of information resource centres in rural communities					
4. High illiteracy rate among the rural dwellers					
5. Inadequate library facilities					
6. Dilapidated library buildings					
7. Inadequate trained manpower					
8. Inadequate staff training and retraining opportunities					
9. Lack of basic infrastructural facilities in most of the rural communities					
10. Lack of patronage of the library services by the rural dwellers					
11. Lack of awareness of library services among the rural dwellers					
12. Language barrier					
13. Others, please specify……………………………………………………..					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

I. Can these address the challenges associated with the provision of public library services in the rural areas?

	SA	A	SD	D	UD
1. Adequate funding of the library by government and NGOs					
2. Provision of adequate and current information resources and relevant services					
3. Establishing information resource centres in the rural communities					
4. Provision of adult literacy programmes for illiterate rural dwellers					
5. Provision of adequate library facilities					
6. Provision of basic infrastructural facilities in rural communities					
7. Marketing and publicity of library services to rural dwellers					
8. Provision of training and retraining opportunities to library staff					
9. Information repackaging					
10. Provision of translation services					
11. Others, please specify……………………………………………………..					

Any other comment or suggestions…………………………………….........................

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

Thank you,

Badamasi Babangida, Mohammed

APPENDIX III: Questionnaire for library users

This questionnaire is meant for library users of public libraries in rural areas in the local government areas. Thank you for agreeing to participate in this survey for the completion of the questionnaire of a PhD study on 'Provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria'. All information provided will be used only for academic purpose and will be kept anonymous and confidential.

A. Demographic information on the respondents

1. **Gender:**
Please indicate your gender
- A. Male   [ ]
- B. Female   [ ]

2. Age:
Please indicate your age range
- A. 18-27 years [ ]
- B. 28-37 years [ ]
- C. 38-47 years [ ]
- D. 48-57 years [ ]
- E. 58 years and above [ ]

3. Please indicate your occupation
- A. Scholar [ ]
- B. Farmer [ ]
- C. Student [ ]
- D. Housewife [ ]
- E. Civil servant [ ]
- F. Artisan [ ]
- G. Others, please specify……………………………

3. Educational Qualification:
Please indicate your educational level
- A. No formal schooling [ ]
- B. Non formal Islamic education [ ]
- C. Elementary [ ]
- D. 'O' Level [ ]
- E. Certificate [ ]
- F. Diploma/NCE [ ]
- G. Degree/HND [ ]
- H. Masters [ ]
- I. Ph. D [ ]

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

N.B.: SA=Strongly Agree A=Agree SD=Strongly Disagree D=Disagree UD=Undecided

B. Are your Information Needs revolve around these areas?

	SA	A	SD	D	UD
1. Agricultural information • Inputs (fertiliser, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals) • Farm implements (plough, harrow, cultivators) • Tractors • Machineries (thrasher, winnower, harvester) • Farming techniques • Agricultural loans and credits • Marketing • Others please specify………………………………………					
2. Health information • Infectious disease (HIV/AIDS, TB, hepatitis, malaria, influenza, diarrhoea) • Maternal and child health care • Routine immunization • Nutrition • Family planning • Disease/epidemic outbreaks • Environmental sanitation • Others please specify………………………………………					
3. Information on government policies • Governance • Elections and voters' registration • Population census • Afforestation • Deforestation • Skills acquisition • Government programmes (rural development) • Others, please specify…………………………………………….					
4. Information on economy • Micro-credit loans and finance • Business/entrepreneurial skills • Youths and women empowerment					

• Employment opportunities					
• Others, please specify………………………………………………..					
5. Information for education					
• Universal basic education (UBE)					
• Adult education					
• Girl-child education					
• Nomadic education					
• Others, please specify………………………………………..					
6. Information on culture and recreation					
• Cultural festivals					
• Tourism					
• Documentaries					
• Entertainments					
• Others, please specify……………………………………….					
7. Information on rural development					
• Portable water					
• Rural electricity					
• Food security					
• Mode of transport (bus, car, vans, lorries, motorcycle, bicycle, foot)					
• Accessible road					
• Housing					
• Others, please specify…………………………………….					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

C. Are the library services impacting on your lives?

	SA	A	SD	D	UD
1. In terms of education					
2. In terms of adult literacy					
3. In terms of skills acquisition/occupation					
4. In terms of economy					
5. In terms of well being					
6. In terms of farming activities					
7. In terms of health related issues					
8. In terms of awareness on government policies and programmes					
9. In terms of cultural and recreational activities					
10. Others, please specify…………………………………………...					

Please response to the following question either by agreeing, disagreeing or otherwise on each item:

D. Are these information sources available to you in your library?

	SA	A	SD	D	UD

1. Library printed materials (books, journals, newspapers, magazines)					
2. Town criers as a source from the library					
3. Gatekeepers as a source from the library					
4. Extension workers (VEWs and CHEWs) as a source from the library					
5. Viewing centres					
6. Community information resource centres					
7. Audio/visuals					
8. Posters and fliers					
9. ICTs (e.g. computers and internet facility)					
10. Others, please specify……………………………………………………					

Please response to the following question either by agreeing, disagreeing or otherwise on each item:

E. Do you find, access, and use information you need through these ways?

	SA	A	SD	D	UD
1. visiting libraries/resource centres					
2. Contacting friends					
3. Contacting neighbours					
4. Contacting relatives					
5. Contacts with other people during market days					
6. Receiving information from town criers					
7. Receiving information on radio					
8. Receiving information on television					
9. Contacts through cell phones					
10. Visiting viewing centres					
11. Visiting health centres/dispensaries					
12. Receiving information from extension workers					
13. Receiving information from gatekeepers					
14. Receiving information from village heads					
15. Receiving information from religious leaders					
16. Receiving information from oral traditional healers					
17. Receiving information from schools/adult centres					
18. Others, please specify……………………………………….					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

F. Are these infrastructural facilities available in your rural area?

	SA	A	SD	D	UD
1. Rural electricity					
2. Good telecommunication services					
3. Good road networks/accessible roads					
4. Good transport systems					
5. Portable water					

6. Good health services					
7. Education					
8. Others, please specify………………………………………………………					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

F. Do you face these Challenges in seeking and using information from a public library?

	SA	A	SD	D	UD
1. Absence of library services in rural communities					
2. Centralization of library services at the local governments headquarters'					
3. Ineffective library services in rural communities					
4. Inadequate or inappropriate information resources					
5. Absence of community information resource centres in rural areas					
6. Language barrier					
7. Lack of qualified library personnel					
8. Lack of basic infrastructural facilities in rural communities					
9. Poor telecommunication systems					
10. Economic constraint					
11. Others, please specify……………………………………………………					

Please respond to the following question either by agreeing, disagreeing or otherwise on each item:

G. Can these address the challenges you face when seeking and using from a public library?

	SA	A	SD	D	UD
1. Provision of adequate and relevant information resources and services					
2. Establishing information resource centres in the rural communities					
3. Provision of adult literacy programme for the illiterate people					
4. Provision of translation service					
5. Provision of information repackaging service					
6. Marketing and publicity of library services to rural dwellers					
7. Provision of training and retraining opportunities to library staff					
8. Provision of basic infrastructural facilities in rural communities					
9. Others, please specify……………………………………………………					

Any other comment……………………………………………………………………………………………
……
……
……

Thank you,

Badamasi Babangida, Mohammed

TAKARDAR TAMBAYOYI GA MASU AMFANI DA DAKUNAN KARATU

Wannan takardar tambayoyi an tsara ta ne domin masu afani da dakunan karatu a yankunan karkara dake kananan hukumomi. Muna godiya akan yardarka/ki na bada bayanan da zasu taimaka wajen gudanar da nazari na digirin digirgir akan abubuwan da suka shafi 'Samar da ayyukan dakunan karutu domin samar da bayanan da zasu biya bukatun mazuna yankunan karkara a sashen arewa maso yamma ta najeriya. Muna tabbatar maka/maki cewa dukkan bayanan daka/kika bayar za'a yi amfani dasu ne kawai domin yin wannan nazarin amma ba da wata manufa ba, sannan kuma za'a sakaya sunanka/ki da kuma bayanan daka/kika bayar.

A. bayanai akan masu amsa tambayoyi

1. **Jinsi:**
Fadi jinsinka/ki
    A. Namiji   [   ]
    B. Mace   [   ]

2. **Shekaru**:
Minene kimanin shekarunka/ki
    A. Shekara 18-27   [   ]
    B. Shekara 28-37   [   ]
    C. Shekara 38-47   [   ]
    D. Shekara 48-57   [   ]
    E. Shekara 58 zuwa abinda yayi sama [   ]

3. **Matakin Ilmi:**
Minene matakin ilminka/ki
    A. Banje makaranta ba   [   ]
    B. Ilmin addinini   [   ]
    C. Ilmin firamare   [   ]
    D. Ilmin sakandare   [   ]
    E. Takardar sheda   [   ]
    F. Karamar diploma/takardar shedar ilmi ta kasa   [   ]
    G. Digiri/babbar diploma   [   ]
    H. Masta digiri   [   ]
    I. Digirin digirgir   [   ]

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

N.B.: MY=Maktukar yarda Y=Yarda MRY=Matukar rashin yarda RY=Rashin yarda RM=Rashin matsay

B. Shin bayanan da kake/kike bukata sun shafi wadannan fannonin?

	MY	Y	MRY	RY	RM

1. Bayanai akan harkokin noma • Abubuwan da ake bukata domin harkar noma da kiwo (takin zamani, irrai, maganin ciyawa da kwari, riga kafi, abincin dabbobi, gidan kiwon dabbobi, sinadaran gina jiki) • Galmunan noma na zamani (galmar huda, haro, galma mai yamutsa kasa) • Taraktoci • Na'urori (thrasher, winnower, harvester) • Sabbin dabarun noma • Basussukan noma • Tallata kayan amfanin gona • Ko akawai saura………………………………………..					
2. Bayanai akan sha'anin kiwon lafiya • Cututtukan da ake yadawa (HIV/AIDS, Tibi, ciwon hanta, masassarar cizon sauro, mura, gudawa) • Kulada lafiyar mata masu ciki da kananan yara • Alluran rigakafi • Abinci mai gina jiki • Tsarin iyali • Barkewar alloba • Tsabtace muhalli • Ko akawai saura………………………………………..					
3. Bayanai akan manufofin gwamnati • Sha'anin mulki • Zabubbuka tare da yin rajistar yin zabe • Kidayar jama'a/sansan • Dashen itatuwa • Sare dazuzzuka • Koyon sana'o'i • Shirye-shiryen gwamnati (na raya karkara) • Ko akawai saura………………………………………..					
4. Bayanai akan inganta tattalin arzikin jama'a • Bada basussuka manya da kanana • Kasuwanci da koyon sana'o'i • Samama matasa da mata sana'o'i • Samar da ayyukanyi ga al'ummah • Ko akawai saura………………………………………..					
5. Bayanai akan harkar ilmi • Ilmin baidaya (UBE) • Ilmin manya • Ilmin ya'ya' mata • Ilmin makiyaya					

• Ko akawai saura………………………………………..					
6. Bayanai akan al'adu da shakatawa • Bukukuwan al'adun gargajiya • Yawon shakatawa • Fila filan tarihi • shakatawa • Ko akawai saura………………………………………..					
7. Bayanai akan ayyukan raya karkara: • samar da tsabatacen ruwan sha • samar da wutar lantarki • samar da abinci • hanyoyin sufuri (motocin haya, motocin daukar kaya, motocin shiga, babura, kekuna, tafiya kasa) • ingantattun hanyoyi • samar da gidaje • Ko akawai saura………………………………………..					

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

C. Shin ko ayyukan dakunan karatu na yin tasiri ga rayuwar ka/ki?

	MY	Y	MRY	RY	RM
1. Ilmi (na makarantu da yaki da jahilci)					
2. Koyon sana'o'i/sana'o'i					
3. Tattalin arziki					
4. Ababen more rayuwa					
5. Harkokin ayyukan noma					
6. Harkokin kiwon lafiya					
7. Wayar da kan jama'a akan manufofi da shiry-shiryen gwamnati					
8. Al'adu da shakatawa					
9. Ko akawai saura……………………………………………………					

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

D. Shin ko akwai wadannan kafofin samun bayanan a dakin karatun ku?

	MY	Y	MRY	RY	RM
1. Kayan karatu na dab'i					
2. Jami'an gama gari					
3. Wakilan mazauna karkara					
4. Malaman gona da kuma malaman kiwon lafiya					
5. Cibiyoyin kallace-kallace					
6. Cibiyoyin samar da bayanai a yankunan karkara					

	MY	Y	MRY	RY	RM
7. rediyo/talabijin					
8. Pastoci da kyallaye					
9. Kafofin yanar gizo					
10. Ko akawai saura……………………………………………………….					

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

E. Shin kana samun, dacewa da samun bayanai tare da amfani dasu ta wadannan hanyoyin?

	MY	Y	MRY	RY	RM
1. Ziyartar dakunan karatu/ko ziyartar cibiyoyin bayanai					
2. Tuntubar abokai					
3. Tuntubar makwabta					
4. Tuntubar yan'uwa					
5. Ta hanyar haduwa da mutane daban-daban a ranakun kasuwa					
6. Bayanan da aka samu ta hanyar jami'an gama gari					
7. Ta hanyar sauraron rediyo					
8. Ta hanyar kallon talabijin					
9. Ta hanyar wayar salula					
10. Ziyartar cibiyoyin kallace-kallace					
11. Ziyartar cibiyoyin kiwon lafiya/ dakunan shan magani					
12. Ta hanyar malaman aikin gona					
13. Ta hanyar wakilan mazauna karkara					
14. Ta hanyar masu ungunni					
15. Ta hanyar malaman addini					
16. Ta hanyar masu magungunan gargajiya					
17. Ta hanyar makarantu da cibiyoyin ilmin manya					
18. Ko akawai saura…………………………………………………………					

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

F. Ko akwai wadannan ababen more rayuwar a yankin ku?

	MY	Y	MRY	RY	RM
1. Wutar lantarki					
2. Ingantattun hanyoyin sadarwa					
3. Ingantattun hanyoyin sufuri/ kyawawan hanyoyi					
4. Ingantacciyar harkar sufuri					
5. Intaccen ruwan sha					
6. Ingantacciyar kiwon lafiya					
7. Ilmi					
8. Ko akawai saura……………………………………………………………..					

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

G. Shin ko kuna fuskantar wadannan kalubalen wajen nema tare da amfani da bayanai daga dakunan karatu?

	MY	Y	MRY	RY	RM
1. Rashin ayyukan dakunan karatu a yankunan karkara					
2. Iyakance ayyukan dakunan karatu a helkwatar kananan hukumomi					
3. Rashin ingantattun ayyukan dakunan karatu a yankunan karkara					
4. Rashin wadatattaun kayayyakin samar da bayanai daga dakunan karatu					
5. Rashin cibiyoyin samar da bayanai a yankunan karkara					
6. Matsalar rashin jin turanci					
7. Rashin kwararrun ma'aikatan dakunan karatu a yankunan karkara					
8. Rashin ababen more rayuwa a yankunan karkara					
9. Rashin ingantattun hanyoyin sadarwa a yankunan karkara					
10. Halin matsin rayuwa					
11. Ko akawai saura……………………………………………..					

Amsa wannan tambayar ta hanyar chankar abida ya dace da ra'ayin ka/ki daga cikin zabin da aka baka/ki a gefe:

H. Shin ko wadannan hanyoyin zasu iya magance kalubalen da kuke fuskanta wajen nema da kuma amfani da bayanai daga dakunan karatu?

	MY	Y	MRY	RY	RM
1. Samar da wadatattu da kuma ingantattun kayan tattara bayanai da kuma ingantattun ayyukan dakunan karatu.					
2. Kafa cibiyoyin samar da bayanai a yankunan karkara					
3. Samar da shirin yaki da jahilci ga marassa ilmi a yankunan karkara					
4. Samar da ayyukan fassara zuwa harshen da mazauna yankunan karkara ke ji					
5. Tattara bayanai a cikin makunshin da mazauna karkaka sukafi sani					
6. Tallata tare da yada ayyukan dakunan karatu ga mazauna yankunan karkara					
7. Samar da horo akai akai ga ma'aikatan dakunan karkara					
8. Samar da ababen more rayuwa a yankunan karkara					
9. Ko akawai saura…………………………………………………					

Ko akwai Karin bayani ko shawara……………………………………………………………………
………
………
………

Na gode,

Badamasi Babangida, Mohammed

APPENDIX V: Observation guide

1. Library Policy Documents
2. Physical Condition/Structure of the Library Buildings
3. Information Resources Available (quantity and quality)
4. Library Facilities and Equipment Available
5. Basic Infrastructural Facilities Available in the Rural Areas

Thank you,

Badamasi Babangida, Mohammed

APPENDIX VI: Analysis of semi-structured interviews conducted with the 5 directors of the state library boards in the North-Western zone of Nigeria

Themes	Director Kaduna state library board	Director Katsina state library board	Director Jigawa state library board	Director Kebbi state library board	Director Zamfara state library board
Sex	Male	Female	Male	Male	Male
Age	50 years	56	50+ years	55 years	50+ years
Highest educational qualification	Master's degree	Bachelor's degree	Bachelor's degree	Bachelor's degree	Bachelor's degree
Law/policy establishing the library	Edict No. 11 of 1976.	Edict of 1976 inherited from the defunct Kaduna state.	Edict of 2008.	Edict of 1990 inherited from the defunct Sokoto state.	Edict of 1990 inherited from the defunct Sokoto state
How the law covers issues relating to Funding, Staffing, building, information resources, facilities and equipment	Under the law, the state government is sole responsible for the Funding, staffing, Building, information resources, facilities and equipment	By the law, the state government funds the library and its branches. It also provides the libraries, book collection, Furniture and everything.	The state government is responsible for funding the entire affairs of public library services in the state.	The funding and everything is by the state government.	Under the edict, the state government is responsible for funding and all other things
Information resources available for rural dwellers	Printed materials like books, newspapers, magazines	The branch libraries deal with only printed materials	Printed materials, computers, radio,	Only printed materials such as books, newspapers	Printed materials, and ICTs.

	and journals. Audio/visuals are also available	such as books, newspapers and journals. But 3 of the branch libraries are equipped with e-libraries	television, Audio/visuals and posters.	and magazines.	
Information services provided to rural dwellers	Traditional library services and extension services, organizing readership campaigns, competitions, debates, seminars and workshops.	The information services provided are just reference, circulation, reserve and children.	The services are reference, circulation, serial, and children services. Also collaborate in adult literacy programme by providing books for the programme.	Traditional library services such as reference service circulation, serials and children services	Only traditional library services are provided.
Challenges that affect the provision of public library services in the rural areas	High illiteracy and poverty among rural dwellers, inadequate facilities like vehicles and ICTs, inadequate manpower and lack of CIRCs in the rural areas. Others challenges are lack of reading habit	Poor funding, inadequate information resources and some outdated books, high level of illiteracy among rural dwellers, lack of patronage of the libraries by majority of the rural dwellers,	The main challenges are funding, inadequate and outdated information resources, high illiteracy rate among rural dwellers, inadequate library facilities like vehicles and ICTs. Others include lack of mobile	Poor funding, inadequate and outdated information sources, dilapidated library buildings, absence of CIRCs in the rural areas. Others are inadequate manpower and absence	Poor funding, inadequate information sources high illiteracy rate among the rural dwellers, inadequate facilities like vehicles and vans, absence of public libraries in most of the local

	among rural dwellers and lack of patronage of the library services by the rural dwellers as a result of poverty.	lack of vehicles and lack of ICTs in most of the libraries, inadequate manpower, dilapidated buildings, lack of water, electricity and good roads, as well as lack of CIRCs in the rural areas.	library services, inadequate training and retraining opportunities for the staff, lack of CIRCs and some few dilapidated library buildings.	of training and retraining for the staff, inadequate power supply and water in the rural areas.	government areas, lack of CIRCs in the rural areas, inadequate trained manpower, lack of training and retraining opportunities for staff, lack of electricity
How can the challenges be addressed.	By inculcating reading habit among rural dwellers, provision of adequate manpower. A new approach for the provision of public library services for rural dwellers is needed.	The state government and local governments need to assist in funding the libraries to tackle all other challenges.	Provision of adequate funding from governments or NGOs actually.	Adequate funding of the libraries by the government, NGOs and individuals and establishment of CIRCs in the rural areas,	Adequate funding from government and NGOs to address all other issues. There is need for new approach for public library services in rural areas

APPENDIX VII: Informed consent

UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

Information Sheet and Consent to Participate in Research

Date: 27 June 2017.

Dear
Prof/Dr/Mr/Ms/Mrs…………………………………………………………………………

My name is Badamasi Babangida Mohammed, I am a Ph.D student with the following contact address:

New arts building,
Information Studies department,
School of social sciences,
University of KwaZulu-Natal,
Pietermaritzburg campus,
South Africa.
Phone numbers +27 633 14 3837, +2348032763929, +2348051251607, 09023380346
E-mail: 214582759@stu.ukzn.ac.za, mbadamsi81@gmail.com, mbadamasi80@yahoo.com

You are being invited to consider participating in a study that involves research "Provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria". The aim and purpose of this research is to investigate on the provision of public library services in meeting the information needs of rural dwellers in the North-Western zone of Nigeria, which is for academic purpose only. The study is expected to enroll 427 participants, which comprise five (5) Directors of state library boards in the North-Western zone of Nigeria, fifty two (52) heads of functional branch public libraries in the local government areas in the zone, and three hundred and seventy (370) registered library users (from the age of 18 years and above) across all the fifty two (52) functional branch public libraries in local government areas in the zone. It will involve the following procedures: face-to-face interviews, administration of questionnaires, and observations. The duration of your participation if you choose to enroll and remain in the study is expected to be between 30 and 45 minutes only.

The study does not involve any risks and/or discomforts. We hope that the study will create the following benefits: will identify the information needs of the rural dwellers in the North-Western zone of Nigeria. It will also recommend a new approach that will enhance the provision of public library services that will meet the information needs of rural dwellers

based on the identified information needs. As such it will also serve as a tool for authorities in the North-Western zone of Nigeria in particular, and Nigeria in general, towards redesigning and revitalizing the provision of public library services to rural dwellers for sustainable rural development. It will also contribute to knowledge in the field of library and information science.

Since the study does not involve any potential risks and/or discomforts, as such neither compensation no medical and/or psychosocial interventions are made available as treatment for participation in the study.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number **HSS/0808/017D**).

In the event of any problems or concerns/questions you may contact the researcher at:

 New arts building,
Information studies department,
University of KwaZulu-Natal,
Pietermaritzburg campus,
School of social sciences,
Phone: +27633143837, +2348032763929, +2348051251607, 09023380346
Email address: 214582759@stu.ukzn.ac.za, mbadamasi81@gmail.com, or mbadamasi80@yahoo.com
Or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za
Participation in this research is voluntary (and that participants may withdraw participation at any point), and that in the event of refusal/withdrawal of participation the participants will not incur penalty or loss of treatment or other benefit to which they are normally entitled. The participant has the right to withdraw at any point in time from the study, for any reason without consequences for such a withdrawal. However, for an orderly withdrawal from participation in this study, the participant may refuse to sign this consent and his/her

withdrawal will not attract any consequences. The researcher will only terminate the participant from this study if he/she voluntarily refuses to sign this consent.

The participants will not incur any costs as a result of participation in the study. As such neither incentives no reimbursements are made available for participation in the study.

Information given in this study is confidential and would strictly be used for academic purpose only. The study will protect confidentiality of personal/clinical information by hiding the identity of the participants by the use of coding. The research instruments used will not be accessible to anybody except the supervisor. The Data will be stored in electronic formats protected by passwords and accessible to the supervisor. In addition, questionnaires, interviews and documentary analysis, as well as observations schedules will be stored by the school of social sciences and will be shredded after 5 years under the direction of supervisor or his designate.

Consent

I ……………………………………………………………………………. have been informed about the study entitled "Provision of public library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria" by Badamasi Babangida Mohammed/……………………………………………………………….

I understand the purpose and procedures of the study is investigating the provision of public library services in the North-Western zone of Nigeria through face to face interviews, administration of questionnaires, and observations.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed that since the study does not involve any risks and/or discomforts neither compensation nor medical treatment are made available for my participation in the study.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at:

New arts building,
Information studies department,
School of social sciences,
University of KwaZulu-Natal,
Pietermaritzburg campus,
School of social sciences,
Phone: +27633143837, +2348032763929, +2348051251607
Email address: mbadamasi81@gmail.com or mbadamasi80@yahoo.com

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to (delete which is not application):

Audio-record my interview   YES / NO

_____   _____

Signature of Participant   **Date**

_____   _____

Signature of Witness   **Date**

(Where applicable)

_____   _____

Signature of Translator   **Date**

(Where applicable)

APPENDIX VIII: (Hausa translated informed consent)

KWAMITIN BINCIKE NA FASAHAR DAN ADAM DA KIMIYAR ZAMANTAKEWARSA NA JAMI'AR KWAZULU-NATAL

TAKARDAR NEMAN AMINCEWA DON GUDANAR DA BINCIKE A CIKIN AL'UMMA

SANARWAR AMINCEWA

Masu bincike su kula: Duk da bukatar yin daidai, a yi kokarin ganin cewar an samar da bayanai masu balagar harshe kuma masu saukin fahimta, ba tare da anyi tsallaken muhimman abubuwa ba. Ana bukatar gamsassar fassarar bayanai, matukutar an amince da bukatar.

Amma ana samun wani yanayi na musamman a inda za a iya karbar amincewa da baka, haka kuma da yanayin da kwamitin bincike na fasahar dan adam da kimiyar zamantakewarsa (HSSREC) zai iya janye neman amincewar mai shiga cikin binciken.

Bayanin amincewa don gudanar da bincike

Kwanan wata: 27 ga Yuni, 2017.

Zuwa ga

Farfesa/Dakta/Malam/Malama……………………………………………………………

……………….

Sunana Badamasi Babangida Mohammed, dalibi ne mai karatun digiri na uku mai adireshi kamar haka:

New arts building,
Information Studies department,
School of social sciences,
University of KwaZulu-Natal,
Pietermaritzburg campus,
South Africa.
Lambobin waya: +27 633 14 3837, +2348032763929, +2348051251607, 09023380346
E-mail: 214582759@stu.ukzn.ac.za, mbadamsi81@gmail.com, mbadamasi80@yahoo.com

Ana bukatar ka shiga cikin binciken da ake gudanarwa mai taken "Samar da ayyukan babban dakin karatu domin samar da bayanan da mazauna yankunan karkara ke bukata a sashen Arewa maso yamma ta Najeriya". Manufar wannan bincike it ace don samar da ayyukan babban dakin karatu domin samar da bayanan da mazauna yankunan karkara ke bukata a sashen Arewa maso yamma ta Najeriya wanda ya shafi fanin ilimi kadai. Binciken zai yi

amfani da kimanin mutane 427, wanda suka kunshi manyan daraktoci guda biyar (5) na hukumomin manyan dakunan karatu na jihohi a Arewa maso yamma ta Najeriya, mutum hamsin da biyu (52) na shugabannin manyan dakunanan karatu na rassan kananan hukumomi a cikin shiyyar, da kuma mutum dari uku da saba'in (370) na masu amfani da dakukunan karatu (da ya hada da yan shekara sha takwas da abinda yayi sama) a rassa hamsin da biyu(52) na manyan dakunan karatu a kananan hukumomin shiyyar. Za'a bi hanyoyi kamar: ganawa ta baka-da-baka da kuma rarraba takardun tambayoyin bincike da kuma ziyara don ganin kwakwaf. Lokacin da za a dauka idan ka/kin amince ba zai wuce minti talatin (30) zuwa arba'in da biyar (45) ba kacal.

Bincike bai shafi wata musgunawa ko tsangwama ba. Muna cike da fatar binciken zai samar da alfanu kamar haka: zai gano bukatun da mazuna yankunana karkara suke da su na bayanai a shiyyar Arewa maso yamma ta Najeriya. Haka kuma zai ba da shawarwarin hanyoyin da za a bi na inganta ayyukan manyan dakunan karatu don biyan bukatun mazauna yankunan karkara gwargwadon bayanan da suke bukata. Saboda haka, binciken zai zama kayan aiki ga hukumomi na shiyyar Arewa maso yamma ta Najeriya a kebe, dama Najeriyar baki daya, wajen inganta da farfado da kuma sake fasalin ayyukan babban dakin karatu ga mazauna karkara ta yadda za'a samu cigaba mai dorewa a yankunan karkara.

Tunda binchike bai kunshi wata kasada da/ko musgunawa, don haka babu wani tandi biyan diyya ko magani ga masu bada bayanai ba.

Wannan bincike a an daddale shi kuma kwamitin bincike na tsangayar fasahar dan Adam da zamantakewarsa na jami'ar KwaZulu-Natal (UKZN) ta amince da shi (lambar amincewa**HSS/0808/017D**).

Idan akwai wata matsala, ko damuwa/tambaya sai'a tuntubi mai bincike ta wannan adireshin:

New arts building,
Information studies department,
University of KwaZulu-Natal,
Pietermaritzburg campus,
School of social sciences,
Phone: +27633143837, +2348032763929, +2348051251607, 09023380346
Email address: 214582759@stu.ukzn.ac.za, mbadamasi81@gmail.com, mbadamasi80@yahoo.com

Ko kuma a tuntubi tsangayar fasahar dan Adam da zamantakewarsa na jami'ar Kwazulu-Natal a wannan adireshin:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Babu tilastawa a wajen shiga cikin wannan bincike ko barazana, mutum zai shiga wannan bincike ne bisa radin kansa/kanta (kuma zai iya janyewa a kowane lokaci yaso/taso), kuma janyewar baza ta jaza masa/mata wani hukunci ba, ko rasa duk wani alfanu da ya/ta cancanta. Duk da haka, wanda ya shiga wannan bincike yana iya kin sa hannu a wannan takardar amincewa kuma janyewar ba za ta haifar da wani hukunci ba a kan sa.

A binciken ba a yi tanadin wani abu na goro ko lada ba.

Duk bayanan da aka samo a wannan bincike za a aje su cikin sirri kuma za a yi amfani da su kan abin da ya shafi fagen ilimai kawai. Haka kuma za a sirranta sunan mai shiga cikin wannan bincike da bayanai ta hanyar amfani da wasu lambobi. Hanyoyin da aka bi da bayanan da aka samo ba za a bar wani ya kai gare suba, sai fa mai duba aikin binciken kawai. Za a adana bayanan a cikin na'urar kwamfuta yadda sai mai duba aikin ne kadai zai iya ganin su. Haka kuma takardun tambayoyi da aka yi amfani da su da bayanai da abin da aka gani da ido ko ganin kwakwaf, duk hukumar makarantar zata adana su. Sannan kuma za a lalata su bayan shekara biyar (5) bisa umarnin mai duba aikin.

AMINCEWA

Ni …………………………………………………………………………. hakika an mani bayanin bincike mai taken "samar da ayyukan babban dakin karatu domin samar da bayanai ga mazauna yankunan karkara ke bukata a sashen arewa-maso yamma a Najeriya",wanda Badamasi Babangida Mohammed/…………………………………………………………………. ke gudanarwa.

Na fahimci manufofi da kuma hanyoyin gudanar da binciken shine "samar da ayyukan babban dakin karatu domin samar da bayanai ga mazauna yankunan karkara ke bukata a sashen arewa-maso yamma a Najeriya", ta hanyar ganawa ta baka-da-baka, rarraba takardun tambayoyin bincike, da kuma lura ganin kwakwaf.

An bani damar amsa wasu tambayoyi kuma na bada gamsassun amsoshi. , kuma zan iya janyewa kowane lokaci ba tare da ya shafi rasa wani alfanu da na cancanta ba.

An sanar da ni cewar binciken bai shafi kasada da rayuwa ba ko wata musgunawa, don haka babu bukatar wani tanadi na magani a lokacin binciken.

Idan ina da wata matsala ko tambaya da ta shafi binciken zan tuntubi wannan adireshin:

New arts building,
Information studies department,
School of social sciences,
University of KwaZulu-Natal,
Pietermaritzburg campus,
School of social sciences,
Phone: +27633143837, +2348032763929, +2348051251607
Email address: mbadamasi81@gmail.com or mbadamasi80@yahoo.com

Idan ina da tambaya kan hakkokina a matsayina wanda ya amincewa ya shiga cikin wannan bincike, ko kuma akwai wata damuwa game da wani bangare na binciken ko masu binciken, to zan tuntubi wannan adireshin:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Karin jaddada amincewa ta, kamar yadda ya dace

Na amince da (a goge wanda bai shafe ka/ki ba):

A dauki muryata a ganawa   I/ A'a

_____   _____

Sa hannun mai bada bayani   **Kwanan wata**

_____   _____

Sa hannun mai bada sheda   **Kwanan wata**
(Idan akwai bukata)

_____   _____

Sa hannun mai fassara   **Kwanan wata**
(Idan akwai bukata)

APPENDIX IX: Introduction letter to Library Board of Kaduna State

15th October, 2016

The Director,
Library Board of Kadauna State,
North-Western zone,
Nigeria.

Dear Sir/Ma,

RE: Introducing Mr Badamasi Babangida Mohammed a PhD Student at University of KwaZulu-Natal

My name is Badamasi Babangida Mohammed, I am a doctoral student (Information Studies) at the University of KwaZulu-Natal, South Africa. The title of my PhD research is **"Provision of Public Library Services to Meet the Information Needs of Rural Dwellers in the North-Western Zone of Nigeria".**

In view of the above, I therefore, seek the permission of all Directors of the States Library Boards in the north-western zone of Nigeria, to grant me access and approval to carry out my research in the public (branch/divisional) libraries in local government areas in each state in the zone. I will need a letter of approval from you, to present to my University because UKZN ethical compliance regulations require me to provide proof that the relevant authority where the research is to be undertaken has given me the approval.

I appreciate your support and understanding to grant me the permission to carry out my research in your branch/ divisional libraries. If you need any further information, you may wish to contact my supervisor on the address below.

Thank you in advance for your understanding

Badamasi Babangida, Mohammed

Dr. Francis Garaba (Supervisor)
University of KwaZulu Natal
School of Social Sciences
PMB campus
Pietermaritzburg
Email: garaba@ukzn.ac.za
Tel: +27 33 260 5321
Cell: 0745135910

APPENDIX X: Research permit from Library Board of Kaduna State

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
LIBRARY BOARD OF KADUNA STATE
No. 6 Bida Road, Private Mail Bag No 2061
Kaduna - Nigeria

E-mail: libraryboardkaduna2@gmail.com

LBK/ADM/48/VOL.V/105

Ref:_____

Date:_____ 10ᵗʰ January, 2017

Dr. Francis Garaba (Supervisor),
University of KwaZulu Natal,
School of Social Sciences,
Pietermarizburg.
South Africa.

RE: INTRODUCING MR. BADAMASI BABANGIDA MOHAMMED

I am directed to write and refer to your letter on the above subject matter, and to convey Management approval for the research in our Library.

Accept our esteem regards now and always, please.

MOHAMMED SABIU DANBALA,
PRINCIPAL (TRAINING SCHOOL),
For: DIRECTOR OF LIBRARY SERVICES.

APPENDIX XI: Introduction letter to Katsina State Library Board

UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

15th October, 2016

The Director,
Katsina States Library Board,
North-Western zone,
Nigeria.

Dear Sir/Ma,

RE: Introducing Mr Badamasi Babangida Mohammed a PhD Student at University of KwaZulu-Natal

My name is Badamasi Babangida Mohammed, I am a doctoral student (Information Studies) at the University of KwaZulu-Natal, South Africa. The title of my PhD research is **"Provision of Public Library Services to Meet the Information Needs of Rural Dwellers in the North-Western Zone of Nigeria".**

In view of the above, I therefore, seek the permission of all Directors of the States Library Boards in the north-western zone of Nigeria, to grant me access and approval to carry out my research in the public (branch/divisional) libraries in local government areas in each state in the zone. I will need a letter of approval from you, to present to my University because UKZN ethical compliance regulations require me to provide proof that the relevant authority where the research is to be undertaken has given me the approval.

I appreciate your support and understanding to grant me the permission to carry out my research in your branch/ divisional libraries. If you need any further information, you may wish to contact my supervisor on the address below.

Thank you in advance for your understanding

Badamasi Babangida, Mohammed

Dr. Francis Garaba (Supervisor)
University of KwaZulu Natal
School of Social Sciences
PMB campus
Pietermaritzburg
Email: garaba@ukzn.ac.za
Tel: +27 33 260 5321
Cell: 0745135910

APPENDIX XII: Research permit from Katsina State Library Board

KATSINA STATE LIBRARY BOARD

Our Ref: KTLB/ADM/GEN/V/265

Your Ref:

Date 4th January, 2017

P.M.B. 2064, IBB Way,
Katsina, Katsina State
Nigeria.
Phone:070 37968740
Katsina.StateLibarary@gmail.c

Dr. Francis Garaba,
Information Studies,
School of Social Sciences,
P.M.B. Campus,
University of Kwazulu – Natal,
South Africa.

LETTER OF APPROVAL/GRANTING PERMISSION TO CONDUCT A RESEARCH

I write to refer to a letter dated 15th October, 2016 introducing Badamasi Babangida Mohammad a Ph.D. student from your University, who wants to conduct his Ph.D research in our branch Public Libraries in Local Government Areas, that the Management of Katsina State Library Board has given him approval/permission to conduct his research as per requested.

Mansur M. Darma
For: Executive Director

....
Executive Director Haj. Zainab Y.D Arm'iya'u, Director Admin & Supply, Alh. Mansur M Darma, Head, Central Library Lawal Abdu Bugaje, Director Finance & Account, Alh. Abdullahi Isa Mashi, Head, Field Organization Department Alh. Abbas Abubakar Sadiq, Estate Officer, Alh. Bilyaminu M. Alhaba

APPENDIX XIII: Introduction letter to Jigawa State Library Board

15th October, 2016

The Director,
Jigawa States Library Board,
North-Western zone,
Nigeria.

Dear Sir/Ma,

RE: Introducing Mr Badamasi Babangida Mohammed a PhD Student at University of KwaZulu-Natal

My name is Badamasi Babangida Mohammed, I am a doctoral student (Information Studies) at the University of KwaZulu-Natal, South Africa. The title of my PhD research is **"Provision of Public Library Services to Meet the Information Needs of Rural Dwellers in the North-Western Zone of Nigeria".**

In view of the above, I therefore, seek the permission of all Directors of the States Library Boards in the north-western zone of Nigeria, to grant me access and approval to carry out my research in the public (branch/divisional) libraries in local government areas in each state in the zone. I will need a letter of approval from you, to present to my University because UKZN ethical compliance regulations require me to provide proof that the relevant authority where the research is to be undertaken has given me the approval.

I appreciate your support and understanding to grant me the permission to carry out my research in your branch/ divisional libraries. If you need any further information, you may wish to contact my supervisor on the address below.

Thank you in advance for your understanding

Badamasi Babangida, Mohammed

Dr. Francis Garaba (Supervisor)
University of KwaZulu Natal
School of Social Sciences
PMB campus
Pietermaritzburg
Email: garaba@ukzn.ac.za
Tel: +27 33 260 5321
Cell: 0745135910

APPENDIX XIV: Research permit from Jigawa State Library Board

JIGAWA STATE LIBRARY BOARD DUTSE

Adamu Abubakar Maje Rd
P.M.B. 7060
YADI DUTSE
Tel: _____

19/1/2017

Date: _____

JSLB/ADM/166/I/1

In case of reply
please quote ref no. ....

Dr. Francis Garaba,
University of KwaZulu Natal,
School of Social Sciences,
PMB Campus,
Republic of South Africa.

RE: INTRODUCING MR. BADAMASI BABANGIDA MOHAMMED, A PhD STUDENT

I am directed to refer to your letter of 15th October, 2016 with the above caption.

In the same vein, I am pleased to inform you that, the management of Jigawa State Library Board has approved the request of the above named student and is ready to give him all the necessary assistance he may require towards conducting his research successfully.

Best regards
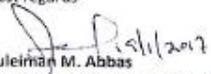
Suleiman M. Abbas   19/1/2017
Set-in Director Administration & Finance
For: Executive Secretary

APPENDIX XV: Introduction letter to Kebbi State Library Board

15th October, 2016

The Director,
Kebbi States Library Board,
North-Western zone,
Nigeria.

Dear Sir/Ma,

RE: Introducing Mr Badamasi Babangida Mohammed a PhD Student at University of KwaZulu-Natal

My name is Badamasi Babangida Mohammed, I am a doctoral student (Information Studies) at the University of KwaZulu-Natal, South Africa. The title of my PhD research is **"Provision of Public Library Services to Meet the Information Needs of Rural Dwellers in the North-Western Zone of Nigeria".**

In view of the above, I therefore, seek the permission of all Directors of the States Library Boards in the north-western zone of Nigeria, to grant me access and approval to carry out my research in the public (branch/divisional) libraries in local government areas in each state in the zone. I will need a letter of approval from you, to present to my University because UKZN ethical compliance regulations require me to provide proof that the relevant authority where the research is to be undertaken has given me the approval.

I appreciate your support and understanding to grant me the permission to carry out my research in your branch/ divisional libraries. If you need any further information, you may wish to contact my supervisor on the address below.

Thank you in advance for your understanding

Badamasi Babangida, Mohammed

Dr. Francis Garaba (Supervisor)
University of KwaZulu Natal
School of Social Sciences
PMB campus
Pietermaritzburg
Email: garaba@ukzn.ac.za
Tel: +27 33 260 5321
Cell: 0745135910

APPENDIX XVI: Research permit from Kebbi State Library Board

KEBBI STATE LIBRARY BOARD
DR. YUSUF BALA USMAN LIBRARY COMPLEX

Patrick Aziza Road
off Argungu Road
P.M.B. 1071
Tel. 068 321161
Birnin Kebbi
Kebbi State.

Our Ref._____

Your Ref._____

Date:_____ 01/02 17 20____

Dr. Francis Garaba,
University of Kwazu-Natal,
School of Social Sciences,
PMB Campus,
Pietermaritzburg.

Sir,

LETTER OF PERMISSION TO CONDUCT A RESEARCH

With reference to your letter dated 15th October, 2016, introducing Mr. Badamasi Babangida Mohammed a PhD student at University of Kwazu-Natal. We hereby write to grant him permission and approval to conduct his research study in our libraries and we promise to ensure that, he receives all necessary support or information in other to make his research work comprehensive, objective and systematic.

We look forward to cooperate with you at any given time.

Thank you.
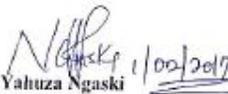
Ahmed Yahuza Ngaski   1/02/2017
For: Executive Director

APPENDIX XVII: Introduction letter to Zamfara State Library Board

15th October, 2016

The Director,
Zamfara States Library Board,
North-Western zone,
Nigeria.

Dear Sir/Ma,

RE: Introducing Mr Badamasi Babangida Mohammed a PhD Student at University of KwaZulu-Natal

My name is Badamasi Babangida Mohammed, I am a doctoral student (Information Studies) at the University of KwaZulu-Natal, South Africa. The title of my PhD research is **"Provision of Public Library Services to Meet the Information Needs of Rural Dwellers in the North-Western Zone of Nigeria".**

In view of the above, I therefore, seek the permission of all Directors of the States Library Boards in the north-western zone of Nigeria, to grant me access and approval to carry out my research in the public (branch/divisional) libraries in local government areas in each state in the zone. I will need a letter of approval from you, to present to my University because UKZN ethical compliance regulations require me to provide proof that the relevant authority where the research is to be undertaken has given me the approval.

I appreciate your support and understanding to grant me the permission to carry out my research in your branch/ divisional libraries. If you need any further information, you may wish to contact my supervisor on the address below.

Thank you in advance for your understanding

Badamasi Babangida, Mohammed

Dr. Francis Garaba (Supervisor)
University of KwaZulu Natal
School of Social Sciences
PMB campus
Pietermaritzburg
Email: garaba@ukzn.ac.za
Tel: +27 33 260 5321
Cell: 0745135910

APPENDIX XVIII: Research permit from Zamfara State Library Board

ZAMFARA STATE LIBRARY BOARD

Old World Wise Cinema,
Ibo Road, Canteen Area,
P.M.B 01102,
Gusau
Tel: 08032516187, 08085457439

Our Ref. ZSLB/GEN/005/VOLII   Your Ref. _____   Date   01-02-2017

Dr Francis Garaba(Supervisor)

University of KwaZulu Natal

School of Social Sciences

PMB Campus

South Africa

Sir,

LETTER OF APPROVAL TO CARRY OUT A Ph.D RESEARCH

I write to refer to your letter dated 15th October, 2016 on the above subject in respect of Mr. Badamasi Babangida Mohammed, a Ph. D student from your University that, Zamfara State Library Board has granted him the permission to carry out his research in our public libraries as requested.

The Zamfara State Library Board is willing to give him all the necessary assistance and cooperation that he requires in carrying out his research.

Thank you.

Best regards,
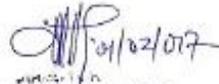
ZAMFARA STATE LIBRARY
BOARD GUSAU

Haliru Attahiru G/Goga

Executive Director

Zamfara State Library Board.

APPENDIX XIX: Approval for Ethical Clearance

UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

24 August 2017

Mr Badimasi Babangida Mohammed (214582759)
School of Social Sciences
Pietermaritzburg Campus

Dear Mr Mohammed,

Protocol reference number: HSS/0808/017D
Project title: Provision of Public Library services to meet the information needs of rural dwellers in the North-Western zone of Nigeria

Approval Notification – Expedited Application

In response to your application received on 19 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)

/ms

Cc Supervisor: Dr Francis Garaba
Cc Academic Leader Research: Professor M Naidu
Cc School Administrator: Ms Nancy Mudau
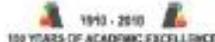
APPENDIX XX: Editor's letters

Cecil Renaud Library
University of KwaZulu-Natal
Pietermaritzburg campus
Pvt Bag X014
Scottsville
3209

Ph: 033 260 5904
Email: kuhn@ukzn.ac.za

Wednesday 26 July 2017

To whom it may concern

This is to certify that I have proofread and effected corrections to Chapter one of Badamasi's thesis. I have checked grammar, spelling, typing, consistency, numbering, formatting and also made editing corrections and suggestions. I have checked the completed corrections. I have also checked the references in terms of their inclusion in both text and bibliography, errors, consistency and completeness. We have different versions of Word which may affect spacing etc.

Rosemary Kuhn
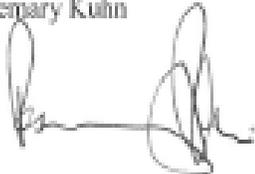
Dr Rosemary Kuhn
Senior subject librarian

Cecil Renaud Library
University of KwaZulu-Natal
Pietermaritzburg campus
Pvt Bag X014
Scottsville
3209

Ph: 033 260 5904
Email: kuhn@ukzn.ac.za

Saturday 2 September 2017

To whom it may concern

This is to certify that I have proofread and effected corrections to Chapter Two of Badan

thesis. I have checked grammar, spelling, typing, consistency, numbering, formatting and

also made editing corrections and suggestions. I have checked the completed corrections

I have also checked the references in terms of their inclusion in both text and bibliograph

errors, consistency and completeness. We have different versions of Word which may at

spacing etc.

Rosemary Kuhn

Dr Rosemary Kuhn
Senior subject librarian

Cecil Renaud Library
University of KwaZulu-Natal
Pietermaritzburg campus
Pvt Bag X014
Scottsville
3209

Ph: 033 260 5904
Email: kuhn@ukzn.ac.za

Tuesday 19 September 2017

To whom it may concern

This is to certify that I have proofread and effected corrections to Chapter three of Badamasi's thesis. I have checked grammar, spelling, typing, consistency, numbering, formatting and also made editing corrections and suggestions. I have checked the completed corrections and made further minor technical corrections.

I have also checked the references in terms of their inclusion in both text and bibliography, errors, consistency and completeness.

Rosemary Kuhn

Dr Rosemary Kuhn

Senior subject librarian

Cecil Renaud Library
University of KwaZulu-Natal
Pietermaritzburg campus
Pvt Bag X014
Scottsville
3209

Ph: 033 260 5904
Email: kuhn@ukzn.ac.za

Friday 29 September 2017

To whom it may concern

This is to certify that I have proofread and effected corrections to Chapter four of Badamasi's
thesis. I have checked grammar, spelling, typing, consistency, numbering, formatting and
also made editing corrections and suggestions. I have checked the completed corrections and
made further minor technical corrections.

I have also checked the references in terms of their inclusion in both text and bibliography,
errors, consistency and completeness.

Rosemary Kuhn

Dr Rosemary Kuhn
Senior subject librarian

Cecil Renaud Library
University of KwaZulu-Natal
Pvt Bag X014
Scottsville
3209

Email: kuhn@ukzn.ac.za
Ph: 033 260 5904

30 May 2018

To whom it may concern

This is to certify that I have proofread Chapter 5 of Badamasi's thesis and used
Word tracking to indicate changes, comments and queries for Badamasi. The
proofreading involved 2 aspects:

- checking grammar, spelling, typos, sentence construction, vocabulary
- checking numbering of sections and tables etc

Several queries I had we discussed face to face.

Badamasi returned a corrected copy which I did another quick check of and made a
few more minor changes

Dr Rosemary Kuhn
Senior subject librarian

Cecil Renaud Library
University of KwaZulu-Natal
Pvt Bag X014
Scottsville
3209

Email: kuhn@ukzn.ac.za
Ph: 033 260 5904

25 July 2018

To whom it may concern

This is to certify that I have proofread chapters 6 and 7 of Badamasi's thesis and used Word tracking to indicate changes, comments and queries for Badamasi. The proofreading involved 2 aspects:

- checking grammar, spelling, typos, sentence construction, vocabulary
- checking numbering of sections and tables etc

Badamasi returned a corrected copy which I did another quick check of and made a few more minor changes.

Dr Rosemary Kuhn
Senior subject librarian