



An investigation on the forms of information sources and services utilised among rural dwellers from public libraries in the North-West zone of Nigeria

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Background: Rural dwellers need timely, accurate, pertinent and reliable information for sustainable rural development. However, in Nigeria it is estimated that over 70% of people are living in rural areas who are mainly non-literate people who cannot read and write in any language. It is against this background that this article sought to investigate the forms of information sources and services utilised among rural dwellers from public libraries in the North-West zone of Nigeria to find out whether they are relevant and appropriate to the nature of this group of people.

Objectives: The study aimed at investigating the forms of information sources and services utilised among rural dwellers from public libraries in the North-West zone of Nigeria for sustainable rural development.

Method: 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 and services. Hence, the model was adopted to underpin the current study. A structured questionnaire was designed and personally administered to the study participants. The quantitative data were analysed using the SPSS software and descriptive statistics.

Results: Despite the fact that most of the rural dwellers in the North-West zone of Nigeria are non-literate people, it is evident from the results that there is utilisation of various forms of information sources and services from public libraries. The predominant forms of information sources utilised among rural dwellers from the libraries were printed materials, posters, flyers and audiovisuals. However, the forms of information services provided to rural dwellers by the libraries were traditional library services and awareness campaigns about government policies.

Conclusion: The study revealed that utilisation of public libraries' information sources and services among rural dwellers in the area under study revolved around printed materials and traditional library services. It is evident that most of the library users among rural dwellers were those who were literate, as the non-literate people who were the majority did not patronise the libraries. Thus, this study will assist authorities of the public libraries in the area under study to provide relevant and effective information sources and services to rural dwellers for sustainable rural development.

Keywords: Utilisation; information sources; information services; public libraries; rural dwellers.

Introduction

Information is a vital tool for addressing societal challenges for sustainable development. Rural people need information for the development of their communities in various spheres of life (Momodu 2012:91). Information comes in various formats and languages, targeted at various categories of users. Tabor (2009:2) noted that people in rural areas are more accustomed to oral tradition and can better relate to information exchanged in that way. Public libraries have an important role in the provision of relevant and effective information sources and services in formats and languages best understood by rural dwellers for sustainable development. Thus, the development of any rural community is a positive indicator of the development of a nation, and information dissemination through public libraries is an essential ingredient in the development of rural communities (Sultana 2014:27). Ejedafiru (2015:48) argues that rural

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populace cannot become knowledgeable and powerful if they do not have relevant information to empower their thinking and enhance their understanding.

Information sources serve as a means of disseminating or communicating information to rural dwellers. Thus, information sources or channels are considered the most important aspect of an information system in a society (Williamson 1998). Anyanwu (2008) is of the opinion that no matter how relevant information might be, if it is wrongly packaged or transferred, it will never reach the target audience successfully. Wilson's 1981 model 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 or informal sources that may result in success or failure. Therefore, it is universally accepted that the improvement in the living conditions of a population largely depends on the appropriate channel used in disseminating information to that population (Momodu 2012:91).

Therefore, the provision of effective information services is the main aim of public libraries in order to satisfy the information needs of their users. 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 & Okorodudu 2012). Thus, 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 & Oshiotse 2014).

Review of related literature

Effective dissemination of information to rural dwellers requires the choice of appropriate information sources or channels. Chinwe, Ogbonna and Osuchukwu (2014) carried out research with a focus on information needs of rural dwellers in Nigeria and found that the information sources available in local information centres included textbooks, newspapers or magazines, picture books, audiovisuals, television and radio, among others. According to the Food and Agriculture Organization (FAO) of the United Nations (2006:3), in rural areas information, knowledge and skills meant for development are exchanged between farmers, extension or advisory officers, information providers and researchers through personal contact 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 appropriate channels of communication (Daudu & Mohammed 2013:235).

Furthermore, information sources facilitate the information-seeking activities of library users in seeking and satisfying their information needs from public libraries. Aina's 2006 library-extension service linkage model suggests that

information materials, such as audio- and videocassettes, audio- and videorecording players, films, projectors, posters and leaflets on agriculture are expected to be collected by the library and serve as channels for information transfer to rural dwellers.

The issues surrounding the utilisation of public libraries' information sources and services among rural dwellers have attracted the attention of many scholars and writers around the world. For example, in the USA, Hildreth (2007:7) clearly pointed out that there was serious concern about the future of rural libraries and indicated that the rural libraries are at a turning point. A study by Sultana (2014:27) found that little attention had been given to the role of rural public libraries in the overall development in India. Sultana observed that rural libraries have not been developed, and that the principal victims have been the rural communities, who, because of information poverty, lack the individual means of becoming literate, and because of their level of illiteracy, poverty or poor health. 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 into the provision of information services, among others. Salman, Mostert and Mugwisi (2014:38) opine that in Africa, public libraries should be charged with the responsibility of providing information services to support local businesses and economic and workforce development, among others.

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 & Madukoma 2012:61). In the USA, for example, Vavrek (1995:36) reported that the information needs of rural Americans were centred on social activities such as hobbies and/or crafts, local business or investment, action of government officials, how to reference, legal matters, local history and genealogy, local news, national news and health or medical services, among others. In China, Zou and Zou (2014:114) reported that the information needs of elderly people in rural communities revolved around physiological needs, such as food, clothing, shelter, action, healthcare and pension policy information.

In Asia, research from Malaysia (Yusop et al. 2013), Bangladesh (Islam 2006) and India (Bachhav 2012; Omar et al. 2012; Thanuskodi & Pandiselvi 2014) showed that the information needs of rural dwellers in these countries are largely concerned with agriculture in general, medical and health matters, education development, religion, culture and business, among others. In Africa, research from South Africa (Jiyane 2002:16; Maepa 2000), Botswana (Mutshehwa et al. 2010:4) and Tanzania (Mtega & Ronald 2013:69) has shown that the information needs of rural dwellers revolved around various areas, such as pension, business, crime, agriculture, transport, proper housing, transport and communication systems and basic healthcare.

In the Nigerian context, research carried out by Ape (2012), Emmanuel (2012), Momodu (2012), Udofia (2012), Daudu and Mohammed (2013), Idiegbeyan-Ose et al. (2015), Patience (2015) and Ezema (2016) showed that the information needs of rural communities can generally be categorised into health, agriculture, education, housing, employment and transportation, among others.

In Nigeria, research by Emmanuel (2012), Daudu and Mohammed (2013), Ifukor (2013), Anie (2014), Annune, Ezeani and Okafor (2014), Idiegbeyan-Ose et al. (2015) and Odefadehan, Akinola and Odefadehan (2016) showed that the information sources or channels used in disseminating information to rural dwellers include town criers, oral information from neighbours, friends, age groups, elders, farmers groups, village leaders, agricultural extension officers, family and/or parents, radio, TV, Internet, books, brochures, films, leaflets, newspapers and magazines, colleagues, marketplaces, mobile phones, sociopolitical meetings, traditional festival, songs and dance, and many more. Research conducted by Uzuegbu (2016) concurred that mass media, and other sources or 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.

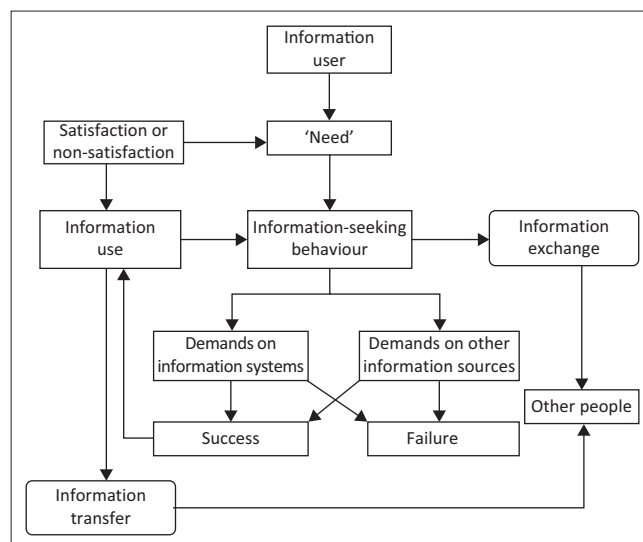
As regards the information services, studies from Nigeria by Omopupa (2006), Ebiwolate (2010), Saleh and Lasisi (2011), Enemute and Okorodudu (2012), Oyeronke (2012), Akinola et al. (2013), Chinwe et al. (2014), Joy and Idowu (2014) and Obasi (2015) revealed that public library and information services generally revolve around reference services, storytelling services, film show services, career information services, online Internet services, lending services and photocopying services. Others include telephone, recreational and advisory services, current awareness, selective dissemination of information, bookmobiles, referral services, translation services, outreach and extension services, adult literacy programmes, audiovisual services, packaging and repackaging of information services and many more.

The above discussion, indicates that there is an existing knowledge gap in the literature, as it is silent on the situation on utilisation of public libraries' information sources and services among rural dwellers in the North-West zone of Nigeria. This is what this study seeks to address through empirical investigation.

Theoretical framework

Wilson's 1981 model of information behaviour was adopted to explain the forms of information sources and services utilised among rural dwellers from public libraries in the area under study.

Figure 1 suggests that Wilson's 1981 model of information behaviour was adequate in addressing all the research questions in this study. The basic and relevant construct in



Source: Wilson, T.D., 1981, 'On user studies and information needs', *Journal of Documentation* 37(1), 3–15. <https://doi.org/10.1108/eb026702>

FIGURE 1: Wilson's (1981) information behaviour model.

the model that guided the current study in addressing the research questions were information needs, sources, services and use. Wilson's 1981 model of information behaviour 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, which result in success or failure (Wilson 1999:251). Thus, the basis of this study was on these constructs of the model.

Accordingly, the following research questions were addressed:

- What are the information needs of rural dwellers in the North-West zone of Nigeria?
- To what extent are information sources and services utilised among rural dwellers from public libraries in the North-West zone of Nigeria?
- What forms of information sources and services are utilised among rural dwellers from public libraries in the North-West zone of Nigeria?

Methodology

The study was carried out in 52 functional branch or public libraries in local government areas in the zone under study. These libraries were established to cater for the information needs of rural communities. Thus, they are controlled by the public library boards of Kaduna, Katsina, Jigawa, Kebbi and Zamfara states. A survey research method was used to carry out this study. The study population comprised two groups of participants. The first group of participants involved 10 574 registered library users (aged 18 years and above), which included both literate and illiterate people. The second group comprised 52 heads of the branch libraries. The total population for each of the two groups in each of the five states is presented in Table 1.

For the sample size, all the 52 heads of functional branch or public libraries in the local government across the study area were recruited automatically (because their population was small). A sample of 370 participants were also 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 is very large, sampling is necessary. According to Krejcie and Morgan's (1970) theory of determining the sample size, if the total population of a study falls 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. This technique was chosen in order to ensure that the researcher does not leave the representativeness of the sample entirely to chance as suggested by Abbas (2009). It also ensures that the sample is similar to the population of the study in certain respects based on the total population from each state. Thus, in recruiting the 370 participants, the researcher used a formula recommended by Krejcie and Morgan's (1970) theory of determining the sample size, as presented below:

$$\frac{N \times S}{TP} \quad [\text{Eqn 1}]$$

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 (see Equation 2 and Table 2):

TABLE 1: Population of the study.

S/N	Total number of states in the North-West zone of Nigeria	Total number of heads of functional branch public libraries	Total number of registered library users
1	Kaduna State	9	950
2	Kano State	The branch public libraries in this state were shut down for renovation and general reorganisation.	The branch public libraries in this state were shut down for renovation and general reorganisation.
3	Sokoto State	The branch public libraries in this state were yet to be operational.	The branch public libraries in this state were yet to be operational.
4	Katsina State	22	1113
5	Jigawa State	14	3037
6	Kebbi State	5	2456
7	Zamfara State	2	3018
-	Total	52	10 574

S/N, serial number.

TABLE 2: Sample size of the study: Proportionate sample from each state under study.

S/N	Participants	Kaduna	Katsina	Jigawa	Kebbi	Zamfara	Total
1	Heads of public libraries in the local government areas	9	22	14	5	2	52
2	Library users	33	39	106	85	107	370
-	Total	42	61	120	90	109	422

S/N, serial number.

$$\begin{aligned} \text{Kaduna State } & 950 \times 370 = 32.69 \text{ (33)} \\ & 10\ 574 \\ \text{Katsina State } & 1113 \times 370 = 38.95 \text{ (39)} \\ & 10\ 574 \\ \text{Jigawa State } & 3037 \times 370 = 106.27 \text{ (106)} \\ & 10\ 574 \\ \text{Kebbi State } & 2456 \times 370 = 85.94 \text{ (85)} \\ & 10\ 574 \\ \text{Zamfara State } & 3081 \times 370 = 107.81 \text{ (107)} \\ & 10574 \\ \text{Total} & = 370 \end{aligned} \quad [\text{Eqn 2}]$$

Table 2 indicates that the total sample size for this study comprised 52 heads of functional branch or public libraries in the local government areas and 370 library users. In total, the sample size for the study is 422 participants.

Two sets of questionnaires were designed to collect data from both groups of participants and a Likert scale technique was used. The participants were presented with a range of answer options to indicate whether they strongly agreed, agreed, disagreed, strongly disagreed or were not sure about each item question. The questionnaire for the library users was also translated into Hausa for non-literate library users. Hausa is the common language spoken across the zone under study. The questionnaires were administered personally by the researcher with the help of research assistants. The English version questionnaire was self-completed, while the translated questionnaire was interviewer-completed. In essence, it was read out to the non-literate participants at the site of data collection for their effective responses. The research assistants were trained on how to administer both the English version and Hausa-translated questionnaires. Thus, the questionnaires were designed to collect data on information needs of rural dwellers, information sources and services utilised among the library users as rural dwellers. The responses to each of the items on the questionnaires are presented and analysed in tables of frequencies and percentages using SPSS software and descriptive statistics.

As regards the ethical considerations, the ethical requirements of the Humanities and Social Sciences Research Ethics Committee of the University of KwaZulu-Natal were strictly adhered to. During the data collection process the researcher, who is versed in Hausa language explained the main purpose of the study to the participants for clarification. This was done to reassure them of total confidentiality and develop trust. They were assured that the information elicited from them would be used strictly for academic purposes. Informed consent forms were introduced to the participants in order to obtain their consent for participation in the study. This was also done to assure them of their anonymity and their rights to withdraw from the research at any time without any consequences.

Presentation and analysis of results

A total of 332 and 51 questionnaires were duly completed and retrieved from the library users and heads of branch libraries, respectively, with a response rate of 89.7%

and 98.1%. This was achieved as a result of the strong follow-ups as well as the employment of research assistants in the administration and retrieval of the research instruments.

Demographic variables of the participants

The findings of this study reveal that men dominated the study population more than women. This indicates that there were more men involved in the utilisation of public library services in the area under study. Only three (5.9%) of the heads of branch libraries were women, while 48 (94.1%) heads were men. As regards the users, 238 (71.7%) were men and 94 (28.3%) were women. This development can basically be attributed to the religious and cultural restrictions on women in this geo-political zone. The study also found that the common age among the heads of the branch libraries was generally 45 years and above, with a few below 45 years. Thus, the majority of the heads of branch libraries were mature, middle-aged people. The most common age group of the library users ranged from 18 to 27 years and from 28 to 37 years. Most of the library users were younger people, meaning that young people have the ability to access and utilise information sources and services from public libraries. Another factor is that this is the stage where young people strive to self-actualise themselves for sustainable rural development.

From Table 3, in terms of educational qualification, over half (64.7%) of heads of the branch libraries were

TABLE 3: Distribution of the participants by their highest educational qualifications.

Educational qualification	Heads of branch libraries		Library users	
	Frequency	%	Frequency	%
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
Master's degree	-	-	6	1.8
Total	51	100	332	100

NCE, Nigerian Certificate in Education; HND, Higher National Diploma.

Diploma/Nigerian Certificate in Education (NCE) holders. The findings thus indicate that only a few (5; 9.6%) heads of the branch libraries had a Bachelor's degree in librarianship. This lack of a degree among heads of branch libraries is a cause of concern, as these figures showed the poor qualification attainment by this group of participants. According to Nwokocha (1998:101), the public library like any other organisation needs adequate, well-trained, dedicated and experienced personnel to carry out the library services effectively and efficiently. This finding indicates that there was a lack of training and retraining of library staff, which could be attributed to poor funding of the libraries. Opara (2008:352) noted that public libraries are not adequately funded in Nigeria; in fact, all other problems of the libraries have emanated from the poor funding. Opara (2008:356) further observed that the libraries ought to be headed by professionals but were instead headed by para-professionals or even non-professionals, including branch libraries in some local government areas.

Table 3 further shows that most of the library users possessed a Diploma or NCE degree as well as a degree/Higher National Diploma (HND). The findings reveal that 93 (28.0%) and 108 (32.5%) library users, respectively, possessed these qualifications. This distribution implies that most of the rural dwellers that patronised public library services in the area under study were considered relatively educated. The reasons for non-use of the libraries by the majority of non-literate people could be attributed to the forms of information resources and services offered by the libraries, as highlighted in Tables 13 and 14.

With regard to the classifications of the library users, opinions of the heads of branch libraries were solicited and are presented in Table 4:

Table 4 indicates that the classification of the library users comprised people from different walks of life. Civil servants formed the largest category of library users, as indicated by 50 (98%) heads of branch libraries, followed by the general category of students and adults within the respective communities as the most common library users. This was

TABLE 4: Opinions of the heads of branch libraries on the classification of the library users ($N = 51$).

Classification of the library users	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Students	39	76.5	10	19.6	-	-	1	2.0	1	2.0	4.7
Subsistence farmers	13	25.5	24	47.1	4	7.8	6	11.8	4	7.8	3.7
Large-scale farmers	10	19.6	18	35.3	6	11.8	6	11.8	11	21.6	3.2
Artisans	3	5.9	16	31.4	4	7.8	18	35.3	10	19.6	2.7
Civil servants	28	54.9	22	43.1	-	-	-	-	1	2.0	4.5
Literate people	30	58.8	15	29.4	2	3.9	1	2.0	3	5.9	4.3
Non-literate people	2	3.9	19	37.3	6	11.8	19	37.3	5	9.8	2.9
People living in terrain areas	3	5.9	14	27.5	7	13.7	21	41.2	6	11.8	2.7
Adults	34	66.7	15	29.4	1	2.0	-	-	1	2.0	4.6
Children	28	54.9	19	37.3	-	-	2	3.9	2	3.9	4.4
Housewives	15	29.4	14	27.5	3	5.9	14	27.5	5	9.8	3.4
Unemployed	23	45.1	15	29.4	1	2.0	7	13.7	5	9.8	3.9
Others (teachers, nurses and researchers)	2	3.9	-	-	-	-	3	5.9	46	90.2	1.2

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

revealed by a total of 49 (96.1%) heads of branch libraries on each, respectively; a total of 47 (92.2%) also 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%) as well as housewives along with large-scale farmers (28; 54.9%). Unemployed people (jobless) were also among the library users, as indicated by 38 (74.5%) heads of branch libraries. This indicates that the unemployed patronised the library services in search of job vacancies. Another reason could be that they might probably patronise the library services for leisure and for current affairs with a view to keeping themselves abreast of day-to-day happenings.

However, the study found that other categories of persons like non-literate people, artisans and people living in terrain areas virtually did not patronise the library services at all, as indicated by a very small number of the heads of branch libraries. This indicates that the forms of information sources and services available in the libraries are not relevant to these categories of persons, which is a challenge to the libraries under study.

Information needs of rural dwellers in the North-West zone of Nigeria

Among the information needs enquired about were agriculture, health, economy, government policies, education, culture and recreation, and rural development. The opinions of the heads of branch libraries were solicited and scored on a five-point scale (see Table 5).

Table 5 shows that agricultural information needs were wide ranging and related mainly to inputs such as fertiliser, seeds, pesticides, vaccines, feeds, housing, and vitamins and

minerals, which topped the agricultural information needs of the rural dwellers. This is reflected in the mean score of 4.6. These needs tended to be consistent with the occupational orientation of the rural people, which is primarily farming. Information needs about farm implements like ploughs, harrows and cultivators were the next with a mean score of 4.5. The needs for information on agricultural machinery (e.g. thrashers, winnowers and harvesters), farming techniques and marketing of agricultural products were basically rated almost the same, with mean scores of 4.2, 4.1 and 3.9, respectively.

With regard to health information needs, Table 6 shows that information relating to infectious diseases (such as HIV and AIDS, TB, hepatitis, malaria, influenza and diarrhoea) and information about routine immunisation were the most outstanding information needs, as identified by the heads of branch libraries, with a mean score of 4.4. Information on routine immunisation, nutrition, disease or epidemic outbreaks and environmental sanitation were equally ranked with a mean score of 4.0. These were followed by information needs about family planning, with a mean score of 3.8.

Table 7 shows that information on governance topped the information needs of the rural dwellers on government policies, with a highest mean score of 4.3. This was followed by information on elections and voters' registration and population census, with mean scores of 4.1 and 4.0, respectively; information on government programmes for rural development, with a mean score of 3.9; and information on afforestation, with a mean score of 3.8. Information about deforestation and skills acquisition was ranked the same, with a mean score of 3.7.

TABLE 5: Opinions of the heads of branch libraries on agricultural information needs of rural dwellers ($N = 51$).

Agricultural information needs	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Inputs (fertiliser, seeds, pesticide, vaccines, feeds, housing, vitamins and minerals)	39	76.5	10	19.6	-	-	-	-	2	3.9	4.6
Farm implements (plough, harrow and cultivators)	31	60.8	18	35.3	-	-	-	-	2	3.9	4.5
Tractors	30	58.8	13	25.5	-	-	4	7.8	4	7.8	4.2
Machineries (thrasher, winnower and harvester)	24	47.1	20	39.2	2	3.9	1	2.0	4	7.8	4.2
Farming techniques	28	54.9	14	27.5	3	5.9	2	3.9	4	7.8	4.2
Agricultural loans and credits	27	52.9	16	31.4	-	-	3	5.9	5	9.8	4.1
Marketing	26	51.0	14	27.5	-	-	2	3.9	9	17.6	3.9
Others	4	7.8	4	7.8	-	-	-	-	43	84.3	1.5

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

TABLE 6: Opinions of the heads of branch libraries on health information needs of the rural dwellers ($N = 51$).

Health information (heads of branch libraries)	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Infectious diseases (HIV and AIDS, TB, hepatitis, malaria, influenza and diarrhoea)	35	68.6	10	19.6	2	3.9	1	2.0	3	5.9	4.4
Maternal and child healthcare	28	54.9	19	37.3	-	-	1	2.0	3	5.9	4.3
Routine immunisation	30	58.8	17	33.3	1	2.0	-	-	3	5.9	4.4
Nutrition	25	49.0	14	27.5	2	3.9	6	11.8	4	7.8	4.0
Family planning	19	37.3	18	35.3	4	7.8	4	7.8	6	11.8	3.8
Disease/epidemic outbreaks	18	35.3	24	47.1	2	3.9	3	5.9	4	7.8	4.0
Environmental sanitation	24	47.1	18	35.3	-	-	2	3.9	7	13.7	4.0
Others	2	3.9	1	2.0	-	-	1	2.0	47	92.2	1.2

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

As shown in Table 8, the heads of the branch libraries were of the view that the economic information needed most by the rural dwellers was on youth and women empowerment, with a mean score of 4.5. The information needs by hierarchy according to the heads of branch libraries, apart from the youth and women empowerment, were micro-credit loans and finance, and employment opportunities, with a mean of 4.3 each, while the information need on business/entrepreneurial skills was ranked the least, with a mean score of 4.2.

Table 9 shows that the rural dwellers needed as much information about tertiary and secondary education as about universal basic education (UBE), with a mean score of 4.4 each. Other educational information needs of almost equal importance were those on adult education

(mean score 4.3), girls' education (mean score 4.2) and nomadic education (mean score 4.1).

Table 10 shows that information on cultural festivals topped the information needs of rural dwellers, with a mean score of 4.0, followed by entertainment at the second position, with a mean score of 3.7, and tourism and documentaries ranked at the same level, each with a mean score of 3.6.

Table 11 shows that information needs about potable water and modes of transportation ranked as the first priority of rural dwellers, with a mean score of 4.4, among the areas of rural development mentioned. This was followed by information needs on electrification (mean 4.3), food security (mean 4.3) and accessible road (mean 4.1) along with housing (mean 3.7).

TABLE 7: Opinions of the heads of branch libraries on information needs of the rural dwellers on government policies ($N = 51$).

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

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

TABLE 8: Opinions of the heads of branch libraries on economic information needs of the rural dwellers ($N = 51$).

Economic information needs	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Micro-credit loans and finance	30	58.8	16	31.4	-	-	1	2.0	4	7.8	4.3
Business/entrepreneurial skills	26	51.0	18	35.3	1	2.0	2	3.9	4	7.8	4.2
Youth and women empowerment	32	62.7	17	33.3	-	-	-	-	2	3.9	4.5
Employment opportunities	29	56.9	14	27.5	3	5.9	2	3.9	3	5.9	4.3
Others	6	11.8	1	2.0	-	-	-	-	44	86.3	1.5

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

TABLE 9: Opinions of the heads of branch libraries on educational information needs of the rural dwellers ($N = 51$).

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

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

TABLE 10: Opinions of the heads of branch libraries on culture and recreational information needs of the rural dwellers ($N = 51$).

Information needs on culture and recreation	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Cultural festivals	18	35.3	24	47.1	2	3.9	4	7.8	3	5.9	4.0
Tourism	11	21.6	26	51.0	1	2.0	9	17.6	4	7.8	3.6
Documentaries	11	21.6	27	52.9	2	3.9	4	7.8	7	13.7	3.6
Entertainment	12	23.5	25	49.0	2	3.9	9	17.6	3	5.9	3.7
Others	2	3.9	1	2.0	1	2.0	-	-	47	92.2	1.3

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

TABLE 11: Opinions of the heads of branch libraries on the information needs of the rural dwellers on rural development programmes ($N = 51$).

Information needs on rural development	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Potable water	35	68.6	9	17.6	4	7.8	-	-	3	5.9	4.4
Rural electricity	29	56.9	15	29.4	2	3.9	2	3.9	3	5.9	4.3
Food security	27	52.9	18	35.3	2	3.9	2	3.9	2	3.9	4.3
Mode of transport (bus, car, vans, lorries, motorcycle, bicycle, etc.)	24	47.1	23	45.1	3	5.9	-	-	1	2.0	4.4
Accessible road	19	37.3	24	47.1	4	7.8	1	2.0	3	5.9	4.1
Housing	17	33.3	18	35.3	5	9.8	5	9.8	6	11.8	3.7
Others	-	-	-	-	1	2.0	-	-	50	98.0	1.0

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

Extent of utilisation of information sources and services among rural dwellers from public libraries in the North-West zone of Nigeria

Opinions of the library users as rural dwellers were solicited on the extent to which the information sources and services were utilised from public libraries in the North-West zone of Nigeria. Table 12 presents the extent of utilisation in frequencies and percentages.

Table 12 shows that the majority of library users as rural dwellers used information sources and services available in the libraries on a daily basis. The data indicate that 105 (31.6%) library users utilised the information sources and services on a daily basis and 88 (26.5%) on a weekly basis. The information sources and services were almost utilised by equal numbers of library users on a monthly and bi-monthly basis. Table 12 shows that 75 (22.6%) of the library users utilised the information sources and services on a monthly basis, while 64 (19.3%) used them on a bi-monthly basis.

Forms of information sources and services utilised among rural dwellers from public libraries in the zone under study

Opinions about the information sources and services available from public libraries were solicited from the library users and heads of the branch libraries. Table 13 shows the responses of the library users on the available information sources they utilised from the libraries.

It is clear from the responses in Table 13 that a total of 79.8% (186; 56.0% and 79; 23.8%) of the library users strongly agreed and agreed, respectively, that printed materials (such as books, journals, newspapers and magazines) were the most frequently utilised information sources among rural dwellers from public libraries. This is reflected in a highest mean score of 4.2. This was attributed to the fact that the majority of people who patronised the libraries were the literate people among the rural dwellers. The perceptions of the library users also indicate that posters and flyers as information sources were rated second in the hierarchy. The data reveal that 64.2% (74; 22.3% and 139; 41.9%) of the participants strongly agreed and agreed, respectively, that they also utilised these forms of information sources from public libraries. This is reflected in a mean score of 3.5. Other information sources utilised among rural dwellers from the libraries were audiovisuals. The responses show that 56.3% (79; 23.8% and 108; 32.5%) of

TABLE 12: Opinions of the library users on the extent of utilisation of information sources and services among rural dwellers from the libraries ($N = 332$).

S/N	To what extent do you use the information sources and services in the library?	Frequency	%
1	Monthly	75	22.6
2	Bi-monthly	64	19.28
3	Weekly	88	26.5
4	Daily	105	31.6
5	Others	Nil	Nil
-	Total	332	100

S/N, serial number.

the participants strongly agreed and agreed, respectively, that audiovisual facilities were utilised from public libraries. This is reflected in a mean score of 3.4.

However, participant responses show that a total of 70.8% (73; 22.0% and 162; 48.8%) of the library users strongly disagreed and disagreed, respectively, that they utilised gatekeepers as information sources from the libraries (Table 13). This is reflected in a mean score of 2.6. Likewise, the responses show that 65.1% (67; 20.2% and 149; 44.9%) of the participants strongly disagreed and disagreed, respectively, that they utilised village extension workers (VEWs) and community health extension workers (CHEWs) as information sources from the libraries (Table 13). This is reflected in a mean score of 2.7. Similarly, participant responses indicate that 60.6% (74; 22.3% and 127; 38.3%) of the participants strongly disagreed and disagreed, respectively, that they utilised community information resource centres as information sources from public libraries (Table 13). This is reflected in a mean score of 2.9. The responses also show that 64.7% (108; 32.5% and 107; 32.2%) of the participants strongly disagreed and disagreed, respectively, that they utilised town criers as information sources from public libraries (Table 13). This is reflected in a mean score of 2.9.

The total frequencies and percentages indicate that the library users did not utilise viewing centres as information sources from the libraries (Table 13). The data indicate that 56.1% (61; 18.4% and 125; 37.7%) of the participants strongly disagreed and disagreed, respectively, that they utilised viewing centres from public libraries (Table 13). The high percentage of no use was because of the unavailability of the service. The viewing centres 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 data reveal that 46.7% (43; 13.0% and 112; 33.7%) of the library users

Table 13: Opinions of the library users on the forms of information sources utilised among rural dwellers from public libraries ($N = 332$).

Information sources utilised among the rural dwellers	SA		A		D		SD		UD		Mean
	F	%	F	%	F	%	F	%	F	%	
Printed materials (books, journals, newspapers and magazines)	186	56.0	79	23.8	26	7.8	14	4.2	27	8.1	4.2
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
Gatekeepers as a source from the library	38	11.4	26	7.8	73	22.0	162	48.8	33	9.9	2.6
Extension workers (VEWs and CHEWs) as a source from the library	31	9.3	51	15.4	67	20.2	149	44.9	34	10.2	2.7
Viewing centres	41	12.3	81	24.4	61	18.4	125	37.7	24	7.2	3.0
Community information resource centres	46	13.9	59	17.8	74	22.3	127	38.3	26	7.8	2.9
Audiovisuals	79	23.8	108	32.5	38	11.4	81	24.4	26	7.8	3.4
Posters and fliers	74	22.3	139	41.9	32	9.6	61	18.4	26	7.8	3.5
ICTs (e.g. computers and Internet facility)	43	13.0	58	17.5	43	13.0	112	33.7	76	22.9	2.6
Others	67	20.2	44	13.3	12	3.6	15	4.5	194	58.4	2.3

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency, VEWs, village extension workers; CHEWs, community health extension workers; ICTs, information and communication technologies.

TABLE 14: Opinions of the heads of branch libraries on the forms of information services provided by public libraries to rural dwellers ($N = 51$).

Does your library provide these services to rural dwellers?	SA		A		D		SD		UD		Mean
	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
Mobile library services	2	3.9	4	7.8	23	45.1	19	37.3	3	5.9	2.7
Information repackaging	3	5.9	9	17.6	20	39.2	14	27.5	5	9.8	2.8
Awareness campaigns on government policies	8	15.7	19	37.3	12	23.5	9	17.6	3	5.9	3.4
Translation services	5	9.8	8	15.7	24	47.1	9	17.6	5	9.8	3.0
Organising meetings, workshops, seminars, and exhibitions for rural dwellers to enhance their living conditions	10	19.6	12	23.5	14	27.5	11	21.6	4	7.8	3.3
Adult literacy programmes	8	15.7	16	31.4	16	31.4	9	17.6	2	3.9	3.4
Others	-	-	2	3.9	-	-	-	-	49	96.1	1.1

SA, strongly agree; A, agree; D, disagree; SD, strongly disagree; UD, undecided; F, frequency.

strongly disagreed and disagreed, respectively, that they utilised ICTs (such as computers and Internet facility) as information sources from public libraries to satisfy their information needs (Table 13). This is reflected in a mean score of 2.6 (Table 13). The data show that only 30.5% (43; 13.0% and 58; 17.5%) of the participants strongly agreed and agreed, respectively, that they utilised such sources from the libraries, while 76 (22.9%) of participants remained undecided (Table 13). The opinions of the heads of branch libraries on the forms of information services provided by public libraries to rural dwellers in the North-West zone of Nigeria are presented in Table 14.

From Table 14, it is clear that the services provided by public libraries to rural dwellers in the North-West zone of Nigeria were mostly traditional library services, which included reference services, circulation services, lending services, serial services and services for children. This is reflected in a mean score of 4.5. The responses show that 90.2% (36; 70.6% and 10; 19.6%) of the participants strongly agreed and agreed, respectively, that such services were provided by the libraries. The second item in the hierarchy was the provision of awareness campaigns on government policies. The responses show that 53% (8; 15.7% and 19; 37.3%) of the participants strongly agreed and agreed, respectively, that such information service was provided by the libraries. This is reflected in a mean score of 3.4.

However, the heads of branch libraries revealed that mobile library services and information repackaging were not provided by the libraries to rural dwellers (Table 14).

The responses show that 82.4% (23; 45.1% and 19; 37.3%) of the participants strongly disagreed and disagreed, respectively, that mobile library services were provided to rural dwellers, as reflected in a mean score of 2.7. Likewise, the responses show that 66.7% (20; 39.2% and 14; 27.5%) of the participants strongly disagreed and disagreed, respectively, that information repackaging services were provided by the libraries to rural dwellers (Table 14). The data also indicate that the libraries did not organise meetings, workshops, seminars and exhibitions as information services for rural dwellers, as revealed by 49.1% (14; 27.5% and 11; 21.6%) participants who strongly disagreed and disagreed, respectively, that such services were provided. Likewise, the responses reveal that 64.7% (24; 47.1% and 9; 17.6%) of the participants strongly disagreed and disagreed, respectively, that translation services were provided by public libraries for the rural dwellers (Table 14). Similarly, the responses indicate that 49% (16; 31.4% and 9; 17.6%) of the participants strongly disagreed and disagreed, respectively, that the libraries under study provided adult literacy programmes as information service (Table 14). From the responses, it is clear that only 47.1% (8; 15.7% and 16; 31.4%) of the participants strongly agreed and agreed, respectively, that such service was provided by the libraries, while two (3.9%) participants remained undecided (Table 14).

Ethical consideration

Ethical clearance was obtained from the Humanities and Social Sciences Research Ethics Committee of the University of KwaZulu-Natal (Reference number: HSS/0808/017D).

Discussion and interpretation of results

Information needs of rural dwellers in the North-West zone of Nigeria

Generally, from the expressed opinions of the heads of branch libraries, it is clear that 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. Public libraries are therefore expected to provide relevant and effective information resources and services that can meet the information needs of rural dwellers in these areas for sustainable rural development. These findings were consistent with those of Ape (2012), Emmanuel (2012), Momodu (2012), Udofia (2012), Daudu and Mohammed (2013), Mtega and Ronald (2013), Idiegbeyan-Ose et al. (2015), Patience (2015) and Ezema (2016).

Forms of information sources utilised among rural dwellers from public libraries in the North-West zone of Nigeria

From the findings of this study, it is evident that the forms of information sources utilised among the rural dwellers from the libraries were mainly printed materials, such as books, journals, newspapers and magazines. This confirms the reason why the majority of people who patronised the libraries were relatively literate people among the rural dwellers. It also confirms the reason why the libraries were patronised by few non-literate people (as shown in Table 3). Other information sources utilised by rural dwellers from the public libraries, as confirmed by most of the library users, were posters and flyers as well as audiovisuals. Most libraries did not have access to online information. These findings support those of Anyalebechi and Udo-Anyanwu (2016) in their research on public libraries in Nigeria, who found that the information sources available in the libraries for the users were more or less textbooks, reference materials, serials or journals, audiovisuals, government publications, electronic information sources and foreign publication. Correa et al. (1997:8) noted that the most effective means of communicating information to rural communities were audiovisual media, such as radio, audio cassettes and films.

Notable from the findings also was the unavailability of other formal places like community information resource centres and viewing centres. As suggested by Aina (2006) and Kamba (2009), these places were supposed to be established by public libraries in rural communities for the extension of library services in the remote rural villages. Likewise, the study did not find that other information sources such as town criers, extension workers, and gatekeepers were available and utilised among rural dwellers from the libraries. The non-literate rural dwellers are more familiar with oral information sources because of their literacy level. Tabor (2009:2) confirmed that rural people are accustomed to oral tradition and can better relate to information exchanged in the way they understand. This shows that public libraries in

the area under study did not incorporate oral information sources and other formal places which are unique to the needs of rural dwellers. Similarly, ICT facilities as information sources were also unavailable in the libraries. This was indicated by about half (46.7%) of the library users, while only 30.5% agreed in that respect and 22.9% remained undecided.

Forms of information services provided by public libraries to rural dwellers in the zone under study

In Nigeria, studies by Omopupa (2006), Ebiwolate (2010), Saleh and Lasisi (2011), Enemute and Okorodudu (2012), Oyeronke (2012), Akinola et al. (2013), Chinwe et al. (2014), Joy and Idowu (2014) and Obasi (2015) found that public library and information services generally revolve around community information services, reference services, storytelling 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. Other services include telephone, recreational and advisory services, current awareness, selective dissemination of information, bookmobiles, referral services, children/school services, computers/Internet/ICT, translation services, user education, outreach and extension programmes, adult literacy programmes, consultancy services, audiovisual services, and packaging and repackaging of information services, among others.

The current study found that the predominant information services provided by public libraries to rural dwellers in the North-West zone of Nigeria were traditional services, which included reference services, circulation services, lending services, serials services and services for children, as well as awareness campaigns on government policies, as confirmed by the majority of heads of branch libraries. These findings concurred with those of Ngcobo (2005) who carried out a research on the role of community libraries in enhancing education in South Africa. The study found that the library services available for the library users included lending services, reference services, audiovisuals and organising debates among school-going children, facilitating adult basic education and training programmes for the adults. Other services included 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 Nigeria, found that the 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, it can be said that the libraries under study did not provide adult literacy programmes; neither did they organise meetings, workshops, seminars and exhibitions nor did they provide

translation services or mobile library services and information repackaging to rural dwellers. These are the kinds of information services that public libraries should provide in rural communities, as suggested by many studies such as those of Iwe (2003), Omopupa (2006), Oyeronke (2012) and Abdullahi (2009).

Recommendations

Public libraries should be adequately funded to provide sufficient and relevant information sources, particularly the oral information sources that are more familiar to non-literate rural dwellers for sustainable rural development.

Innovative services which are unique to the information needs of rural dwellers should be provided by the libraries. Services such as organising meetings, lectures, seminars or workshops, translation services, information repackaging, mobile library services as well as adult and information literacy programmes should be provided by public libraries for sustainable rural development.

Community information resource centres and viewing centres should be established in rural communities to provide relevant information sources and services to rural dwellers in various formats and languages they understand, as suggested by Aina (2006) and Kamba (2009). These centres should be well equipped with effective and efficient audiovisual facilities such as television, TV programmes, videos, projectors and films for educating, enlightening and entertaining people in rural areas for sustainable rural development.

Conclusion

This study provided an insight that most of the rural dwellers who utilised the information sources and services were literate people, as the majority of non-literate people did not patronise the libraries under study (as shown in Table 3). This was because of the fact that the major information sources provided in the libraries were printed materials, which included books, journals, newspapers and magazines. Although other information sources such as posters and flyers and audiovisuals were also available, the libraries did not provide information services unique to the literacy levels of the majority of rural dwellers. It is evident that oral information sources, which the non-literate people are more familiar with, were not available from the libraries. In an ideal situation, Aina (2006) and Tabor (2009) are of the opinion that public libraries are supposed to engage the services of town criers, extension workers and gatekeepers in providing relevant information sources to rural dwellers. Formal places such as community information resource centres and viewing centres are supposed to be established in rural communities for the extension of information sources and services to remote rural villages (Aina 2006).

With the exception of awareness campaigns on government policies, the information services provided were more or less traditional library services, such as reference, lending and

circulation services and services for children, which were only relevant to literate persons. In a typical rural setting where non-literate people are the majority (Aina 2006), only innovative library services such as organising meetings, seminars and workshops on how to improve the living condition of rural dwellers will not only attract non-literate people but also make the services unique for sustainable rural development, as established by Kamba (2009). Other information services such as adult literacy programmes, information repackaging, translation services and mobile library services should be provided by the libraries.

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Competing interests

The authors declare that they have no financial or personal relationship(s) which may have inappropriately influenced them in writing this article. The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the institutions (funders).

Author's contributions

B.B.M. was the research leader and participated in designing the research questions, methodology used, literature review, data collection, codification and analysis, and writing of the manuscript. F.G. participated in designing the research question, literature review, methodology used, data analysis and manuscript editing.

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