

Utilization of Funds Allocated to Agricultural Research Institute Libraries in Nigeria

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ABSTRACT: *This study focused on the utilization of funds allocated to agricultural research institute libraries in Nigeria. All the fifteen (15) agricultural research institute libraries were involved in the main study; three in the pilot study, and twelve in the main study. The survey research method was adopted and the instrument used for data collection was the utilization of funds allocated to Agricultural Research Institute Libraries in Nigeria Questionnaire (UFARILNQ). UFARILNQ solicited responses from the principal officers of ARIs and their librarians who were themselves major users of the libraries. The responses were in line with the two research objectives of the study: utilization of funds allocated and extent to which appropriated funds met services needs of the agricultural research institute libraries. The data collected were analysed using frequency distributions, percentages, mean scores, standard deviation, graphs, and tests of differences and relationships for the four hypothesis. One way ANOVA was used to test for the differences in received funds and their utilization among the ARILs. The study established that funds allocated to ARILs were inadequate but well utilized except for purchase of computers which were deployed for services provision. The services provided were literature search, reference, selective dissemination of information, which were adjudged to be those required to meet the needs of users, except mobile library services which was non-existent. Even as funding was inadequate, the respondents were satisfied with their judicious use resulting in the ARILs offering satisfactory services. However, the hypotheses was tested at significant level of 0.05. The decision of the hypothesis was rejected at $P < 0.05$ and retained at alpha level of 0.05 ($P > 0.05$). For hypothesis one, the observed P-value in the test was 0.134, which was higher than the fixed level of significance 0.05 ($P > 0.05$). From this observation, the null hypothesis that there is no significant difference in fund utilization by Agricultural Research Institute Libraries in Nigeria is therefore retained. Hypotheses one was retained. The recommendations of the study included all funds allocated to the agricultural research institutes libraries in Nigeria should be properly utilized for their respective purposes. Also the librarian of each agricultural research institute libraries in Nigeria should be a Principal Officer of the respective institute to enable the librarian to have a meaningful understanding of funds allocations.*

KEY WORDS: utilization, funds, agricultural research institute, libraries.

INTRODUCTION

The agricultural research institutes in Nigeria receive their yearly allocation from the Federal Ministry of Agriculture and Rural Development. It is then the function of these institutes to allocate funds to all the departments under them, their libraries inclusive. There are some agricultural research institutes in Nigeria that are under universities administration (but not financially), for example, the National Animal Production Research Institute, the National Agricultural Extension and Research Liaison Services, and the Institute for Agricultural Research all in Zaria are under the Ahmadu Bello University, Zaria. These Institutes do not, as mandates, receive allocations from the university, but get occasional funding assistance in form of staffing and donation of books. The issue is whether these donations could adequately meet the services these agricultural research institute libraries are supposed to render to their users. Also, the Institute of Agricultural Research and Training, Ibadan, is affiliated with the Obafemi Awolowo University, Ile-Ife.

It is imperative to note that if funding is important to the operations of agricultural research institute libraries in Nigeria, the sources of funding and its utilization would equally be important to this study. Except where force from government is applied, it will be difficult to obtain the actual figures or values of government allocation from the respondents, by researcher. The respondents will be more comfortable to provide a range of percentage values of allocations received from government.

Statement of the Problem

Inappropriate utilization of funds appeared dangerous because it affect the provision of high quality services. Also, funds appropriated to agricultural research institute libraries in Nigeria assist them to meet the needs of their users; the purpose of these libraries is to provide good services. Therefore, when funds are appropriated, it is to assist them carry out this mandate. The issue is that, almost all the Institutes libraries have their own staff, materials and other equipment which may not be in sufficient quantity or satisfactory to the research institutes.

Research Questions

The study provides answers to the following research questions:

1. How are funds appropriated and utilized to agricultural research institute libraries in Nigeria?
2. To what extent has the funds appropriated and released to agricultural research institute libraries in Nigeria, assisted them in meeting their users' needs in respect to services?

Objectives of the Study

This research study aim at achieving the under listed objectives:

1. To find out the funds appropriated and utilize to agricultural research institute libraries in Nigeria.
2. To find out the extent to which the appropriated funding to the agricultural research institute libraries have assisted them in meeting their users' needs with respect to services.

Hypothesis

The following hypothesis is tested for this study.

1. There is no significant difference in fund utilization by agricultural research institute libraries in Nigeria.

LITERATURE REVIEW

Indeed, a survey conducted on the pattern of expenditures by all United States of America Research Libraries revealed that salaries and wages consumed 60.3% of total budget while books, periodicals and services consumed 29.7% and 10% respectively (Olatunde, 2004). Therefore, if the agricultural research institute library in Nigeria, is allocated funds to acquire certain quantity of materials, and if it is expected to organize these materials and make them available, and also provide services to assist users in its exploitation and if salaries and wages which form a larger percentage of the library's expenditure are to be met, then enough funds have to be provided for the libraries to enable them to carry out their functions effectively. However, the focus of this study is on the overhead resources available to the agricultural research institute libraries in Nigeria and not staff salaries. The truth of the fact that salary is important, it contribute nothing to services rendered by the libraries, as salaries cannot be used for the procurement of the materials. The libraries need to carry out the responsibilities incumbent upon them. Be that as it may, the connecting point between salaries and services is the fact that when salaries are delayed for a long time, the services rendered, even after funding is provided, is affected.

Utilization of Funds Allocated to the Agricultural Research Institute Libraries in Nigeria

When the monies are released to the agricultural research institutes in Nigeria, the Executive Directors take custody of the fund. According to Fowowe (2007) the institutes will deliberate on the funds allocated to agricultural research institutes and see how such funds can be shared to the various Departments and Units concerned, the libraries inclusive. The funds allocated will depend on the approved budget of the organization and disbursed/released to the Institutes. The Executive Directors decide on what will be allocated to their libraries without following written fund allocation policy. Indeed, there is no guideline or written policy as to what amount or percentage of the agricultural research institutes allocations to be disbursed to their libraries. The library funds are derived from the agricultural research institutes budget disbursed to them by government through the Finance Officers (FO) of the Institutes (Edoka, 1992).

According to NAPRI Management report of the 190th meeting, 2014, for example, the budget allocation was a total of N323 million but as a result of an appeal to the National Assembly, Agriculture Committees, additional N100 million was added which meant that the Institute hoped to have a lot of money for training requests for youth from the Federal Ministry of Agriculture and Rural Development, but the library allocation was not stipulated. From the above figure, it is only the Principal Officers that knew the actual money allocated to libraries. Most institute librarians are not members of the Principal Officer's management hence may not be present at the meeting where such money is shared among the programmes/units. Whatever amount the Executive Directors decided upon will be giving to the libraries.

Professional librarians expressed disappointment over the poor financial situation of the libraries in West Africa, where budgets are fixed or reduced and in some cases, especially for

research institutes libraries that were not even having any financial policy statement. Studies have proved that agricultural research institute libraries in Nigeria do not have any fixed amount set aside for their development. Ifidon (1992) from her study discovered that only 0.41 percent of the budgetary allocation was spent on agricultural research institute libraries development and that the libraries did not have separate departmental budgets to spend and concluded that financing the libraries depended on the close relationship between the Executive Directors and librarians of the research institutes; this further exposes the absence of a written policy on percentage of agricultural research institutes allocations to their libraries. At the end of this study, it is envisaged (hoped) and very strongly too, that a document will be produced to initiate a policy for Federal Government to allocate a certain percentage of the institutes' approved annual budget for implementation in the research libraries.

Hence, the research libraries receive whatever its parent organization disburses to them for services provision. Actually the funds received by these research libraries are not adequate to carry out effective and efficient library services for their clients. Some agricultural research institute libraries in Nigeria cannot regularly subscribe to some core journals and other printed and non-printed library materials like ICTs. Tion and Echezama (2014) in their study, "Problems of involving university libraries in the promotion of electronic learning in selected federal universities in North-Central Nigeria", discovered that only few universities libraries have put ICTs in place with external aids/funds. This is similar to some agricultural research institute libraries. Also, it is not all monies stipulated in the budget that are spent appropriately, as deviations might occur; induced by pressure from unforeseen circumstances. Hence, lack of adequate funding will adversely affect the services of the library to its user. However, the library is a social service organization that is capital intensive. Money is needed for books, journals, electronic resources, personnel costs and so forth (Akporhonor, 2005). These funds cover only the recurrent expenditure but sometimes libraries are supported financially by the Ministry of Education, Ministry of Agriculture, Non-Governmental Organizations (NGO's) and agencies (Akporhonor, 2005). This financial support will also pass through the institutes to their libraries. Therefore, the government and Executive Directors of the agricultural research institutes would adapt to find better funding systems for their libraries. This will enhance better provision of adequate information resources and efficient services that will lead to maximum utilization of the libraries by their scientists and others.

For adequacy and effectiveness in the use of funds in the agricultural research institute libraries in Nigeria, the under list factors are identified:

- 1. There must be an existing monitoring team of projects in conjunction with Estate Department:** These are Executive Directors, Estate Managers, Finance Officers, Institute Secretaries and the Heads of Units/Departments where the work is being done. They are to supervise, monitor and evaluate how money is spent in the research libraries for their effectiveness and services rendered to their clients. Most times they do not involve the Head of the Units/Programmes/Departments. Under the context of this study, the institute librarian stands for the Head of Unit.
- 2. Budget monitoring team from the Ministries of Finance and Agriculture:** The monitoring team from the Ministry of Agriculture and Rural Development comes first to monitor how the money released is utilized by research institutes. After that, the

monitoring team from the Ministry of Finance would come later to monitor the project, too. Their duties are to check:

- (a) Actual payment vouchers paid to the contractors.
- (b) Verify actual physical projects executed by research institutes with pictures/photographs on the sites of the project
- (c) Advise on ways to meet up with project requirement.
- (d) Report back to their superior officers on lapses/ achievements of research institutes.
- (e) Recommend disciplinary action against any research institute that does not meet project requirement/executions.
- (f) Monitoring Team Recommendations Stand.

Extent to which Funds Appropriated to Agricultural Research Institute Libraries in Nigeria assisted them in Meeting their Users' Needs in Respect to Services

Ekene et al. (2006) assessed available library resources to ascertain extent and level of adequacy of the resources; some hindrances were observed; such as services being adequate even though unavailable. Also, the results were restricted to medical libraries and to South East of Nigeria and not related to agricultural research institute libraries. It appears there is a paucity of new research information on funding and hence services in agricultural research institute libraries in Nigeria, perhaps, due to frustration experiences from persistent underfunding of the libraries. This means that more research must be executed to further drive the point of inadequate funding to agricultural research institute libraries in Nigeria.

The objectives of funding agricultural research institute libraries is for them to be best placed to fulfill the purpose and mandates of their establishment in accordance with the research priorities identified by the administration (Fasan, 2004). Funds are needed for the infrastructures, staffing, training, furniture, equipment, stationeries, maintenance and services which are needed by the libraries, so that better services will be rendered to library users. Funds are also needed for staff who will obtain and make available the library materials and maintain the services. The cost of all these will represent the extent of funding required by the library to meet the user's needs in respect to services provided.

Funding by government which has been the major source of funding agricultural research institute libraries has been dwindling and quite unpredictable in the last few years. Hence, most agricultural research institute libraries in Nigeria have difficulties in migrating from manual to automation libraries due to underfunding. Funding is essential to any agricultural research institute libraries initiative, especially automation. Automation is very costly in terms of hardware and software and personnel (Ogunleye, 1997). Funding has been the major factor of stunted growth in the research libraries hence making some significant changes from manual to a fully automated library system, very difficult but could be possible by external grants (Abdullah *et al*; 2006). The agricultural research institute libraries must seek for alternative funding if significant progress must be made in deploying ICTs and other core services that may be useful to clients in research libraries. Funding by government which has been the sponsor of 95 percent of the libraries has been dwindling and quite unreliable in the past few years. From the foregoing, agricultural research institutes in Nigeria must brace up and face the challenges posed by underfunding by their parent organizations. They should explore other

sources of funding that would enable them provide the information resources required for effective service provision to researchers. Thus, the extent of funds appropriated to the agricultural research institute libraries in Nigeria seems not to be adequate to carry out their expected services that meet the user's needs.

RESEARCH METHOD

The research method adopted for this study was survey research method, which is quantitative research method. The type of survey method used or adopted for this study was descriptive survey by this method numerical data are collected from respondents using questionnaires to be subjected to statistical analysis. Survey was appropriate and capable for this study because it deals with all of the respondents for this study. Also information required for the study is available with the respondents and could be gotten through questionnaire. According to Busha and Harter (1980), this method aims at bringing out similarities and differences. These are highlighted in order to arrive at valid generalization on the study. And have the advantage of saving time, money, nature of question, nature of group to whom the question(s) are addressed, convenience to subject as well as ensuring efficiency.

Population of the Study

The population of the study comprised of all the six (6) Principal Officers of the agricultural research institutes and the heads of their libraries in the fifteen agricultural research institutes. That is, a total population of one hundred and five (105) respondents, the Table 1 below shows the breakdown of the population of the study. The respondents are the Executive Directors, Directors, Deputy Directors, Institute Secretaries, Finance Officers, Auditors and Heads of Libraries of all the agricultural research institutes under study. The special libraries under study are: Institute for Agricultural Research (IAR), Zaria; National Veterinary Research Institute (NVRI), Vom - Jos; Nigerian Institute for Oil Palm Research (NIFOR), Benin-City; Institute of Agricultural Research and Training (IAR &T), Ibadan; Lake Chad Research Institute (LCRI), Maiduguri; Rubber Research Institute of Nigeria (RRIN), Benin-City; Cocoa Research Institute of Nigeria (CRIN), Ibadan; National Institute for Freshwater Fisheries Research (NIFFR), New Bussa; National Agricultural Extension and Research Liaison Services (NAERLS), Zaria; National Animal Production Research Institute (NAPRI), Zaria; National Institute for Horticultural Research (NIHORT), Ibadan; National Institute for Oceanography and Marine Research (NIOMR), Lagos; National Cereals Research Institute (NCRI), Badeggi; National Root Crops Research Institute (NRCRI), Umudike and Nigerian Stored Products Research Institute (NSPRI), Ilorin.

Table 1: Breakdown of the Study Population (Nigerian Agricultural Research Institutes and their Libraries)

S/No	Institutes (NARIs)	Principal Officers of NARIs	Heads of Libraries of NARILs	Total Population
1.	Institute for Agricultural Research (IAR), Zaria.	6	1	7
2.	National Veterinary Research Institute (NVRI), Vom.	6	1	7
3.	Nigerian Institute for Oil Palm Research (NIFOR), Benin City.	6	1	7
4.	Institute of Agricultural Research and Training (IAR&T), Ibadan.	6	1	7
5.	Lake Chad Research Institute (LCRI) Maiduguri	6	1	7
6.	Rubber Research Institute of Nigeria (RRIN), Benin City.	6	1	7
7.	Cocoa Research Institute of Nigeria (CRIN), Ibadan	6	1	7
8.	National Institute for Freshwater Fisheries Research (NIFFR), New Bussa.	6	1	7
9.	National Agricultural Extension and Research liaison services (NAERLS), Zaria.	6	1	7
10.	National Animal Production Research Institute (NAPRI), Zaria.	6	1	7
11.	National Institute for Horticultural Research (NIHORT), Ibadan.	6	1	7
12.	National Institute for Oceanography and Marine Research (NIOMR), Lagos.	6	1	7
13.	National Cereals Research Institute (NCRI), Badeggi.	6	1	7
14.	National Roots Crops Research Institute (NRCRI), Umudike.	6	1	7
15.	Nigerian Stored Products Research Institute (NSPRI), Ilorin.	6	1	7
	Total	90	15	105

NARIs= Nigerian Agricultural Research Institutes

NARILs= Nigerian Agricultural Research Institute Libraries

Source: Agricultural Research Council of Nigeria, 2010.

Table 1, shows that there were six (6) principal officials in each of the fifteen (15) agricultural research institutes summed up to the total of 90 principal officers. Also table 1, shows one (1) head of library in each of the fifteen (15) agricultural research institute libraries summed up to fifteen (15) heads of libraries. When these are added together, it gives a total of 105 as indicated in Table 1

Sample Size and Sampling Procedure

For this study, a total of twelve (12) of the fifteen (15) agricultural research institute in Nigeria were used. This researcher earlier used three (3) of them, which were selected at random for pilot study hence they were not part of the main study. The researcher used all the remaining twelve (12) Institutes for the study. This is in line with Tuckman who said that “the whole population of a universe would give more weight to the study population that is too small”. To draw the sample of respondents, purposive sampling technique was adopted to select six (6)

principal officers, and one (1) head of library in each of the twelve institutes. This method is supported by Ejifughu (1998) that purposive sampling is a sample selected by a researcher based on his/her judgment of what is suitable or not suitable for the study; or who should be selected for the study. Thus, in all, eighty-four (84) respondents were selected from the twelve (12) agricultural research institutes for this study. Table 2 shows the breakdown of the sample of the population.

Table 2: Breakdown of the Study Sample (Nigerian Agricultural Research Institutes and their Libraries)

S/No	Institutes (NARIs)	Principal Officers of NARIs	Heads of Libraries of NARILs	Total Sample
1	Lake Chad Research Institute, Maiduguri	6	1	7
2	Institute for Agricultural Research, Zaria	6	1	7
3	National Agricultural Extension Research Liaison Services, Zaria	6	1	7
4	Oceanography and Marine Research, Lagos	6	1	7
5	National Institute for Horticultural Research, Ibadan	6	1	7
6	Institute of Agricultural Research and Training, Ibadan	6	1	7
7	Nigerian Stored Products Research Institute, Ilorin	6	1	7
8	National Institute for Freshwater Fishery Research, New Bussa	6	1	7
9	National Animal Production Research Institute, Shika	6	1	7
10	National Veterinary Research Institute, Vom	6	1	7
11	Cocoa Research Institute of Nigeria, Ibadan	6	1	7
12	Rubber Research Institute, Benin City	6	1	7
Total		72	12	84

Source: Field Survey, 2016

Instrument for Collecting Data

The main instrument that was used to collect data for this study was self-developed questionnaire. This was because it was the only instrument that could be used to elicit responses from respondents that cover a wide geographical location in terms of time and fund. It was also the most suitable instrument for generating data in survey study. This is in line with Busha and Harter (1980) who identified three common data collection instruments that are often used in survey research. These are questionnaire, personal interview and observation. For this study only questionnaire was used to collect data.

Questionnaire

One set of questionnaire was constructed and administered in all the agricultural research institute libraries in Nigeria. The questionnaire were mainly closed-ended with instructions which enabled the respondents to answer the right questions on utilization of funds allocated to agricultural research institute libraries in Nigeria. Five (5) points likert rating scale structured questionnaire were used for this study because likert scale elicit responses on opinion, feelings, attitude and values.

Validation of the Instrument

The designed instrument was subjected to validation to determine whether the content met the objective for which it was designed. For the purpose of this study, face and content validity approach was used by subjecting the instrument to professionals in Library Sciences for vetting. Researchers, supervisors and statisticians of same university validate the instruments and necessary corrections made to establish face and content validity. The instrument was therefore considered suitable for the study. Corrections and suggestions made by the professionals were included in the final copy that was used for the pilot study.

Pilot Study (Test)

The designed instrument was subjected to a pilot study in order to determine its reliability for the main study. A total of 18 Principal Officers and 3 Heads of libraries from three Institutes (Nigerian Institute for Oil Palm Research (NIFOR), Benin - City; National Cereals Research Institute (NCRI), Badeggi and National Roots Crops Research Institute (NRCRI), Umudike) were administered with the instrument for the pilot study. The researchers administered twenty-one (21) copies of questionnaire. Only 18 out of the 21 administered questionnaire were returned mainly due to administrative procedure. These 18 amounted to 85.7% as the response rate of the total administered and were therefore analysed for the pilot study. These were not part of the main study taking cognizance of the fact that the subjects of the pilot study did not participate in the main study (Fox, 2009; Gay, 2006). Data collected were coded and submitted for reliability and internal consistency test. The Statistical Package for the Social Sciences (version 17) was used for the determination of the reliability and item consistency index. From the available options in the SPSS package, the Guttman Split-Half procedure for computing reliability Coefficient was selected (Levine & Lezotte, 1995).

Result of Pilot Study and Reliability of the Instruments

The result of the test revealed a reliability coefficient obtained with the Guttman Split-Half Coefficient computed to be 0.80. The internal consistency index obtained with average measure for intra class correlation was 0.93. These observed coefficients are approximately equal to one and therefore consistent with Spiegel (1992).The designed instrument could therefore be said to be not only valid but reliable and internally consistent for this study and studies of similar nature. Analysis of the reliability is presented in Table 3b.

Table 3a: All variables Case Processing Summary

		N	%
Cases	Valid	17	94.4
	Excluded(a)	1	5.6
	Total	18	100.0

A Listwise deletion based on all variables in the procedure.

Table 3b: Guttman Split-Half Coefficient Reliability Statistics Result

Cronbach's Alpha	Part 1	Value	.783
		N of Items	49(a)
	Part 2	Value	.929
		N of Items	48(b)
Total N of Items			97
Correlation Between Forms			.771
Spearman-Brown Coefficient	Equal Length		.871
	Unequal Length		.871
Guttman Split-Half Coefficient			.804

Table 3c: Intraclass Correlation Coefficient

	Intraclass Correlation (a)	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df 1	df 2	Sig
Single Measures	.127(b)	.070	.260	15.103	16.0	1536	.000
Average Measures	.934(c)	.880	.971	15.103	16.0	1536	.000

Procedure for Collecting Data

An introductory letter was collected from the Head of Department of Library and Information Science, Ahmadu Bello University, Zaria which was used to introduce the researcher during data collection. The copies of questionnaire were administered personally (face to face delivery method) by the researchers to all the respondents except the ones sent to Lake Chad Research Institute, Maiduguri by a lecturer of the University of Maiduguri, Maiduguri. The completed copies of questionnaire were collected on days in which visits were made. The exercise lasted for six (6) weeks. This was done to ensure safety of the questionnaire against loss or mutilation.

Procedure for Analyzing Data

To answer the stated research questions analysis, a benchmark weighted mean score of at least 3.0 was considered as agree while those with less than 3.0 as disagree. A benchmark of 3.0 was chosen because it is the midpoint of five point likert scale. To analyse the data, both descriptive and inferential statistics were used. Descriptive statistics such as frequency distribution, percentages, mean scores, standard deviations and graphs were used to analyze data collected with respect to the research question raised in the study. For further analysis (inferential statistics), Statistical Package for the Social Sciences (SPSS) was used to analyze the data collected from the respondents, with respect to the hypothesis designed for this study. The one way analysis of variance was used to test hypotheses which deal with the significant relationships of the groups studied because in the hypotheses, there is only one variable which is fund utilization involved in the test. The hypothesis was tested at 0.05 significant level. The decision of the hypothesis was either rejected at $p < 0.05$ or retained at alpha level of 0.05 ($p > 0.05$).

Data Presentation and Analysis

The data collected were statistically analyzed and the analyses with the discussions are presented in this study.

Response Rate

Out of the eighty-four (84) copies of the questionnaire distributed to the respondents, a total of eighty (80) copies were returned completed and found useful for this study. The high response rate was realized because the researcher was able to get some assistance from the Executive Directors, such that most of the respondents completely filled and returned their questionnaire with the exception of some few. Table 4 presents the total number of copies of questionnaire administered, number returned along with the percentages for each of the institutes covered in the study.

Table 4: Response Rate of the Administered Questionnaires per Institute

S/N	Agricultural Research Institutes in Nigeria involved in the study	Total Number of Questionnaire Administered	Total Number of Questionnaire Returned	Percentage of Total Number of Questionnaire Returned
1	Lake chad Research Institute, Maiduguri	7	7	100
2	Institute for Agricultural Research, Zaria	7	7	100
3	National Agricultural Extension Research Liaison Services, Zaria	7	7	100
4	Oceanography and Marine Research, Lagos	7	7	100
5	National Institute for Horticultural Research, Ibadan	7	7	100
6	Institute of Agricultural Research and Training, Ibadan	7	7	100
7	Nigerian Stored Products Research Institute, Ilorin	7	7	100
8	National Institute for Freshwater Fishery Research, New Bussa	7	7	100
9	National Animal Production Research Institute, Shika	7	6	85.7
10	National Veterinary Research Institute, Vom	7	7	100
11	Cocoa Research Institute of Nigeria, Ibadan	7	7	100
12	Rubber Research Institute, Benin City	7	4	57.1
Total		84	80	95.2

Source: Field Survey, 2016

The total number of questionnaires administered to most of the institutes were completely filled and returned with the exception of NAPRI, Shika where one of the questionnaires could not be retrieved and Rubber Research Institute, Benin where only four were returned and found valid. The total number of questionnaire used for analyses were therefore 80 representing 95.2% response rate of the total administered questionnaires.

Utilization of Funds Allocated to Agricultural Research Institute Libraries in Nigeria

The utilization of funds by agricultural research institute libraries was analyzed on the basis of the resources on which fund was utilized and such other material resources for the services delivery of the libraries. The analyses took into consideration the evaluation of principal officers of the Institutes of such projects and materials including activities on which the funds were expended. Table 5 shows the respondents' opinions on the utilization of funds allocated to the libraries while Tables 1 and 2 show the regularity of the principal officer's inspection of the projects and the regularity of Government teams' visits to monitor and evaluate the projects towards appropriate utilization of the fund provided. Each of the tables was accompanied with graphical illustration of the percentages. For the analyses of the utilization of the fund provided, a mean score computed on a five point scale was presented along the frequencies and percentage. The mean scores were used for decision on the items based on a midpoint of 3.0 and above for agreement and below for disagreement.

Table 5: How Funds allocated to the Libraries are utilized

Utilization of funds allocated to the libraries	Strongly agreed		Agreed		Undecided		Disagreed		Strongly disagreed		Mean
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	
Fund provided for the library is used to buy computers	6	7.5	29	36.3	10	12.5	20	25.0	15	18.8	2.9
Fund provided for the library is used for purchase and maintenance of library equipment, furniture and facilities	9	11.3	43	53.8	6	7.5	12	15.0	10	12.5	3.4
Fund provided for the library is used as imprest to buy stationeries	4	5.0	30	37.5	19	23.8	16	20.0	11	13.8	3.0
Fund provided to the library is used to provide printed and non-printed library materials and Information and Communication Technologies	9	11.3	40	50.0	12	15.0	11	13.8	8	10.0	3.4
The Principal Officers monitor and evaluate the projects for which the funds are allocated	15	18.8	42	52.5	12	15.0	5	6.3	6	7.5	3.7

Key: Mean $\bar{X} = \sum fx / \sum f$

\bar{X} = Mean

\sum = Sum

f = Frequency (Number of Respondents)

x = Strongly Agreed (SA) =5, Agreed (A) = 4, Undecided (U) =3, Disagreed (D) =2, Strongly Disagreed (SD) =1

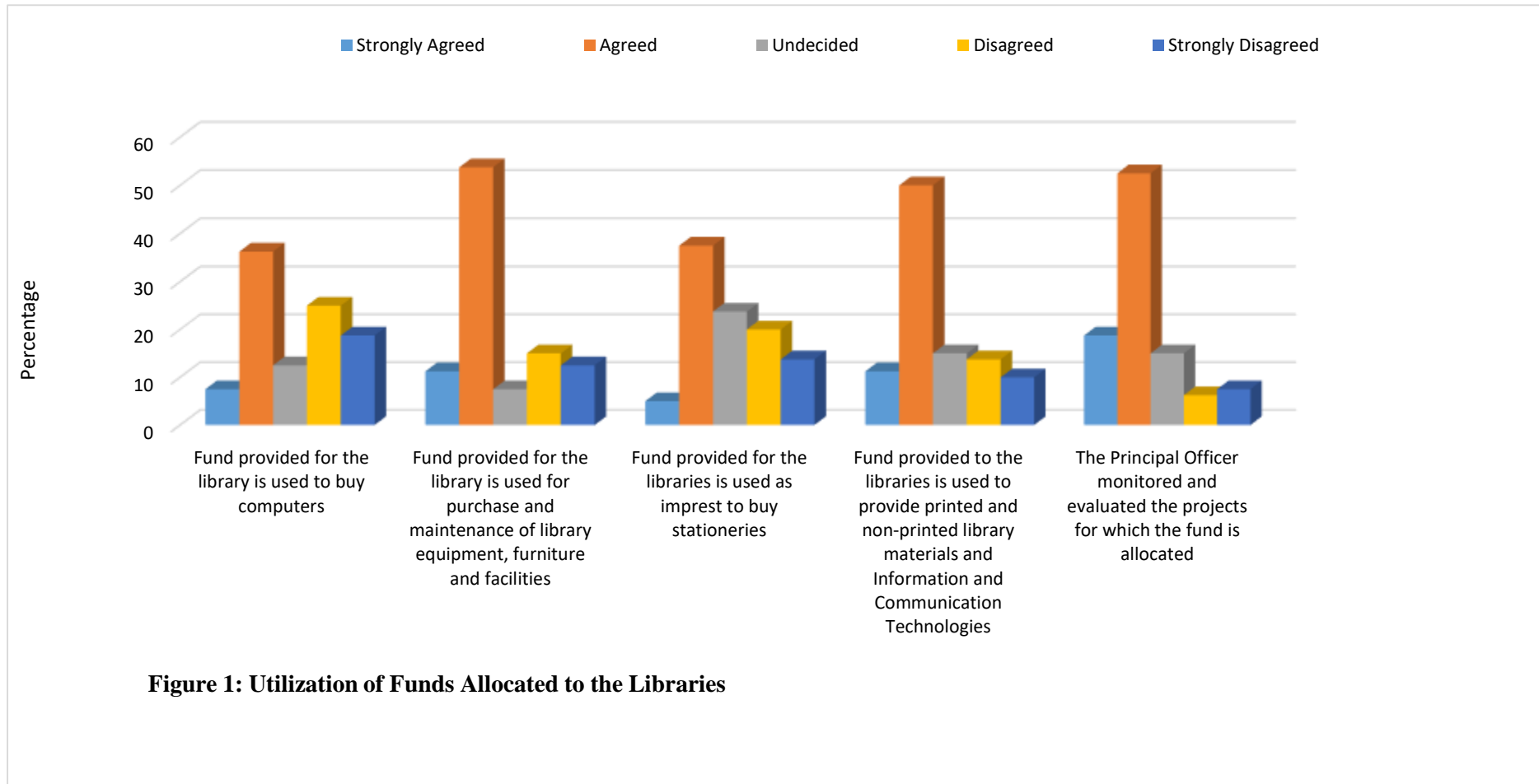


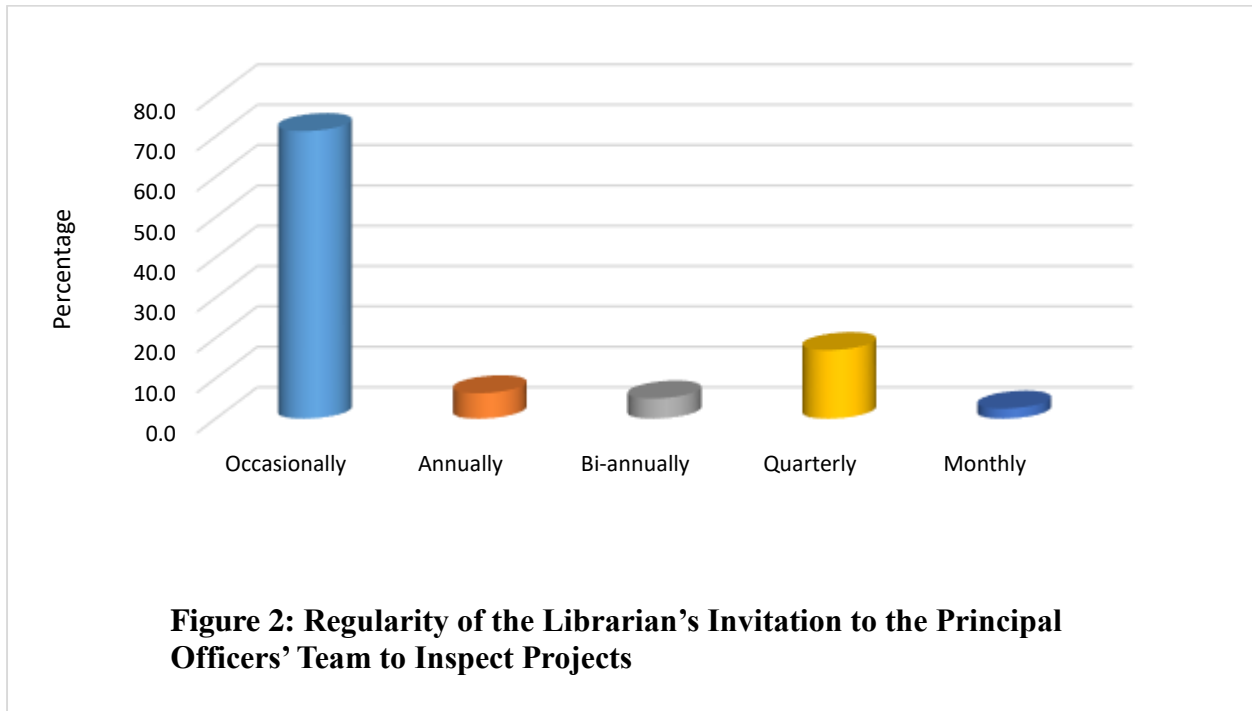
Table 5 reveals that there was no consensus on the use of funds allocated to the libraries for the purchase of computers. In the table, only 29(36.3%) and 6(7.5%) respondents agreed and strongly agreed respectively with the notion but 20(25.0%) and 15(18.8%) of the respondents disagreed and strongly disagreed respectively. But 10(12.5%) of the respondents did not respond to the question. The mean score for the item was 2.9 and is lower than the 3.0 midpoint score for the scale. This finding is consistent with the report of Tion and Echezonen (2014) in their study on “Problems of involving university libraries in the promotion of electronic learning in selected federal universities in North-Central Nigeria”, where it was found that only few universities libraries had put ICTs in place with external aids/funds.

However, the respondents agreed that fund provided for the library was used for purchase and maintenance of library equipment, furniture and facilities, impress to buy stationeries and to provide printed and non-printed library materials and Information and Communication Technologies. They were of the view that this was ensured by the Principal Officers who monitored and evaluated such materials and projects for which such fund was allocated. The finding here is in line with Olatunde (2004), who from a survey conducted on the pattern of expenditures by all United States of America Research libraries revealed that salaries and wages consumed 60.3% of total budget while books, periodicals and services consumed 29.7% and 10% respectively. The finding agrees with Akporhonor (2005) who reported that Money is needed for books, journals, electronic resources, personnel costs and so forth and that funds allocated cover only the recurrent expenditure but sometimes libraries are supported financially by the Ministry of Education, Ministry of Agriculture, Non-Governmental Organizations (NGO’s) and other agencies.

Table 6 shows the opinions of the respondents on the regularity of the librarians’ invitation to the Principal Officers’ team who inspected and monitored the ongoing projects and activities of the library for which funds were allocated. The percentages are graphically illustrated in Figure 1

Table 6: Regularity of the Librarian’s Invitation to the Principal Officers’ Team to Inspect Projects

Regularity of the librarian’s invitation of the Principal Officers	Frequency	Percent
Monthly	0	0.00
Quarterly	14	17.5
Bi-annually	4	5.0
Annually	5	6.25
Occasionally	57	71.25
Total	80	100



The expressed opinions in Table 6 and Figure 2 show that generally, there was no regular interval of inspections of the libraries' projects by principal officers of the Institutes. Such inspections were only conducted on occasional basis. This opinion was expressed by 57(71.3%) of the respondents. The only divergent opinion was by 14(17.5%) of the respondents who were of the view that such inspection was conducted quarterly and 4(5.0) said it was conducted twice in a year while 5(6.3%) of the respondents were of the opinion that it was conducted annually. On the regularity of government team that helped to monitor and evaluate such projects, Table 7 shows the opinions of the respondents, and Figure 2 shows the graphical representation.

Table 7: Regularity of Government Teams' Visit to Monitor and Evaluate Projects and Activities for which Funds were allocated

Regularity of Government Team visit to monitor and evaluate projects and activities for which funds were allocated	Frequency	Percent
Monthly	0	0.0
Quarterly	24	30
Bi-annually	1	1.25
Annually	15	18.75
Occasionally	40	50
Total	80	100

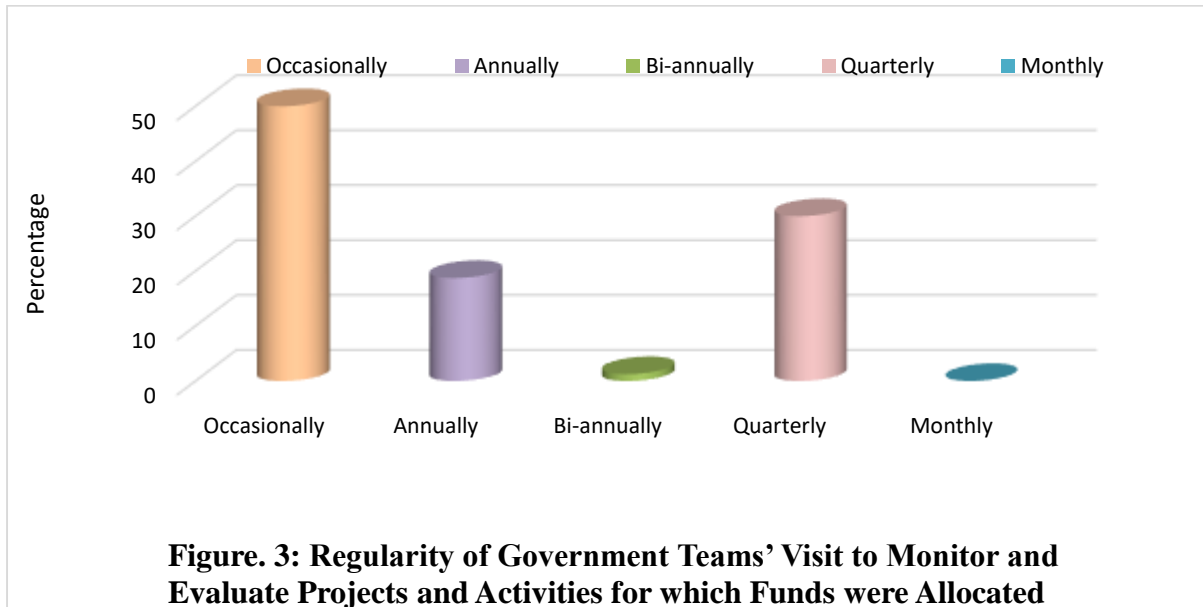


Table 7 and Figure 3 reveal that 50% of the respondents were of the view that government teams only visited occasionally to monitor and evaluate projects and activities for which funds were allocated. However, 24(30.0%) of the respondents were of the view that such government team visits were quarterly and 15(18.8%) were of the view that it was annually. Only 1(1.3%) respondent indicated it was bi-annual. From these observations, there was evidence that funds allocated to the libraries were properly utilized and that projects and activities on which such funds were expended were usually inspected by the institutes' principal officers and government teams to ensure effectiveness of utilization. The inspections, monitoring and evaluation for proper utilization of funds expended for library projects and activities support the findings of Bankoka and Olamola (2006).

Funds allocated to agricultural research institute libraries were properly utilized except for purchase of computers, as indicated by respondents. This was as a result of principal officers and government teams that inspected, monitored and evaluated the activities and projects for which money was expended. The implication is inability of the libraries to provide computer related services to their users.

Extent to which Funds Appropriated to Agricultural Research Institute Libraries in Nigeria Assisted Research Libraries in Meeting their Users' Needs in Respect to Services

The objective was to identify the extent, to which the funds appropriated to agricultural research institute libraries assisted them in meeting their users' needs in respect to services provided. In order to achieve this objective, items or questions were outlined for the respondents to answer. Table 5 shows the details of the extent to which funds appropriated to agricultural research institute libraries assisted them in meeting their users' needs with respect to provision of services.

The opinions of the respondents on the extent to which they agreed that the funds had assisted them in meeting their users' needs are presented in Table 5. The table shows the frequencies and percentages along with mean score for the respective items used in the analyses. The mean scores were used in arriving at decision of agreement or otherwise. Mean score of 3.0 was used as the midpoint score because of the five point scale used in the measurement of the respondents' opinions. The percentages of the expressed opinions are graphically presented in Figure 3

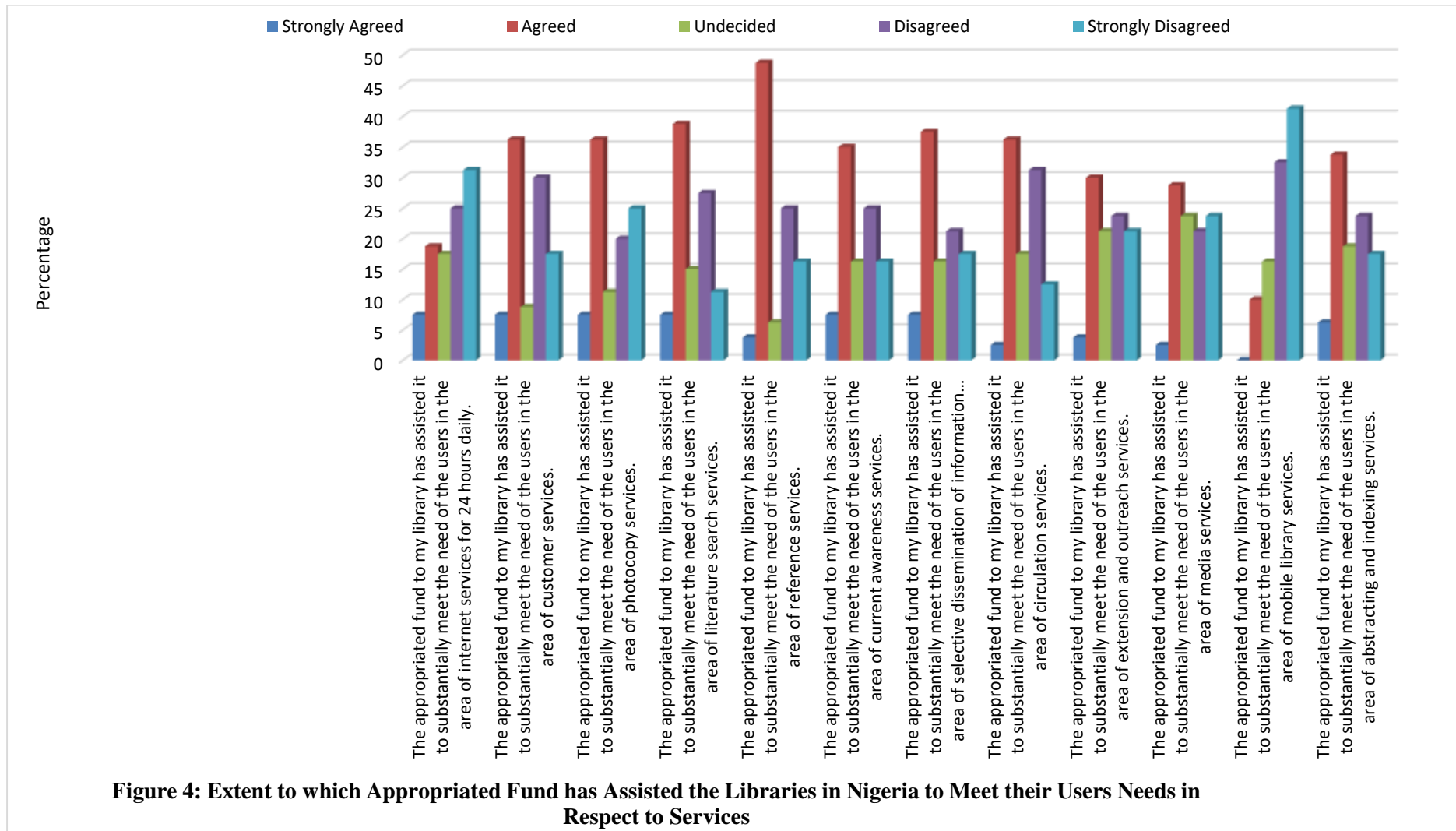
Table 8: Extent to which Funds Appropriated to Agricultural Research Institute Libraries in Nigeria Assisted them in Meeting their Users' Needs in Respect to Services

	Strongly Agreed		Agreed		Undecided		Disagreed		Strongly Disagreed		Mean
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	
Extent to which the funds allocated to the libraries have assisted in their services delivery											
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of Internet services 24/7.	6	7.5	15	18.8	14	17.5	20	25	25	31.3	2.5
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of customer services.	6	7.5	29	36.3	7	8.8	24	30	14	17.5	2.9
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of photocopying services.	6	7.5	29	36.3	9	11.3	16	20	20	25	2.8
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of literature search services.	6	7.5	31	38.8	12	15	22	27.5	9	11.3	3.0
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of reference services.	3	3.8	39	48.8	5	6.3	20	25	13	16.3	3.0
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of current awareness services.	6	7.5	28	35	13	16.3	20	25	13	16.3	2.9
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of selective dissemination of information services.	6	7.5	30	37.5	13	16.3	17	21.3	14	17.5	3.0
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of circulation services.	2	2.5	29	36.3	14	17.5	25	31.3	10	12.5	2.9
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of extension and outreach services.	3	3.8	24	30	17	21.3	19	23.8	17	21.3	2.7
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of media services.	2	2.5	23	28.8	19	23.8	17	21.3	19	23.8	2.7
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of mobile library services.			8	10	13	16.3	26	32.5	33	41.3	2.0
The appropriated funds to my library have assisted it to substantially meet the needs of the users in the area of abstracting and indexing services.	5	6.3	27	33.8	15	18.8	19	23.8	14	17.5	2.9

Key: Mean $\bar{X} = \sum fx / \sum f$

\bar{X} = Mean \sum = Sum f = Frequency (Number of Respondents)

x = Strongly Agreed (SA) =5, Agreed (A) =4, Undecided (U) =3, Disagreed (D) =2, Strongly Disagreed (SD) =1



From the mean scores in Table 8, the funds allocated to the libraries had not been of much help in some of the services delivery in the institutes. Areas of services delivery where the funds had not been of much help included Internet services, customer services, photocopying services, current awareness services, circulation services, extension and outreach services, media services, mobile services and abstracting and indexing services where most respondents did not agree that the funds had assisted (between 2.0 and 2.9) them to substantially meet the needs of their users. The mean scores (2.5, 2.9 2.8, 2.9, 2.9 2.7, 2.7, 2.0 and 2.9) for these services as indicated in Table 8 were all lower than 3.0 respectively. The disagreement with the extent of funds in assisting these services were clearly indicated in Table 8 and Figure. 4. However, the respondents agreed that the appropriated funds had assisted the libraries to substantially meet the need of the users in only three (3) areas of service which were literature search, selective dissemination of information and reference services. These are clearly illustrated in Figure 4 and the mean scores for the services were 3.0 each respectively.

In areas of current awareness, circulation, extension and outreach, abstracting and indexing, mobile library and media services, as indicated in the table and graph, the appropriated funds could not be said to have substantially assisted the libraries. The mean scores for these items were all below 3.0 respectively and as indicated in the graph the perception of the respondents was that of gross inadequacy of funds for these services delivery. The implication here is that the fund provided for the libraries was only adequate to meet only three services. In other words, the funds made available to the libraries were not adequate to substantially assist them in all their services delivery in the institutes.

Test of Hypothesis

The hypothesis was aimed at determining differences on utilization of funds allocated by agricultural research institute libraries as well as to establish relationship between funding and the investigated variables relating to the services delivery of the libraries. The data collected with respect to the hypothesis raised in the study were analyzed and discussed. The hypothesis was tested as follows:

Hypothesis: There is no significant difference of fund utilization by agricultural research institute libraries in Nigeria.

This hypothesis was tested with the one way analysis of variance because in the hypothesis there was only one variable which is fund utilization involved in the test. A summary of the analysis of variance of fund utilization by the libraries is presented in Table 9.

Table 9: Analysis of Variance on Fund Utilization by Agricultural Research Institute Libraries in Nigeria

Source	Sum of Squares	DF	Mean Square	F	P-value	Decision
Between Groups	12.006	11	1.091	1.552	.134	
Within Groups	47.816	68	.703			Retained
Total	59.822	79				

(F-critical = 1.94, P > 0.05)

Table 9 indicated that the observed F-value (1.552) obtained at 11 degrees of freedom between groups and 68 degree of freedom within groups, was lower than F-critical of 1.94 at the above degrees of freedom 11 between groups and 68 within groups. This meant that, the libraries did not differ significantly in fund utilization for their services delivery in the institutes. The observed P-value in the test was 0.134, was higher than the fixed level of significance 0.05 ($P > 0.05$). From this observation, the null hypothesis shows that there is no significant difference in fund utilization by agricultural research institute libraries in Nigeria is therefore retained.

Table 5 shows the mean scores of the different libraries on the mean of fund utilization for their services delivery.

Table 10: Mean Scores of Fund Utilization by the Libraries for their Services Delivery in the Institutes.

Institutes Libraries	N	Mean	Std. Deviation	Std. Error
Lake chad Research Institute, Maiduguri	7	3.40	0.702	0.265
Institute for Agricultural Research, Zaria	7	3.51	0.474	0.179
National Agricultural Extension Research Liaison Services, Zaria	7	2.91	1.082	0.409
Oceanography and Marine Research, Lagos	7	3.49	0.380	0.144
National Institute for Horticultural Research, Ibadan	7	3.54	0.395	0.149
Institute of Agricultural Research and Training, Ibadan	7	3.40	1.189	0.449
Nigerian Stored Products Research Institute, Ilorin	7	3.43	0.734	0.278
National Institute for Freshwater Fishery Research, New Bussa	7	3.26	1.063	0.402
National Animal Production Research Institute, Shika	6	3.17	0.543	0.222
National Veterinary Research Institute, Vom	7	2.80	1.306	0.494
Cocoa Research Institute of Nigeria, Ibadan	7	3.71	0.564	0.213
Rubber Research Institute, Benin City	4	2.00	0.924	0.462
Total	80	3.27	0.870	0.097

From the mean scores in the table, there was no much variability in the pattern of fund utilization. Though the Rubber Research Institute, Benin had the least mean pattern of funds but it was not significantly different from the other institute libraries.

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary of the Study

The purpose of the study was to determine the utilization of funds allocated to agricultural research institute libraries in Nigeria. This study tried to find out how adequate the appropriated funds are utilized for the services provided by agricultural research institute libraries in Nigeria. In order to achieve the objectives of the study, two research questions were formulated and answered as well as the hypothesis tested. To effectively carry out the investigation, a survey research method was employed in the conduct of the study. The population of the study comprised of all the six (6) principal officers of the agricultural research institutes and heads of the libraries of the entire fifteen agricultural research institutes in Nigeria. These gave a total population of one hundred and five respondents. The respondents were Executive Directors, Directors, Deputy Directors, Institute Secretaries, Finance Officers, Auditors and heads of libraries of all the agricultural research institutes under study. They were described under the operational definition as users and beneficiaries (Researchers/Scientists and Students). Twenty one (21) respondents with three agricultural research institutes were used for pilot study and the remaining eighty- four (84) respondents were used for the main study. A structured questionnaire was designed and validated through face and content validity and the pilot was tested for reliability and consistency of items within the instrument. The tested instrument was then administered to a total of 84 respondents in the twelve agricultural research institute libraries in Nigeria along with their librarians as used for the main study. Out of the copies of the 84 questionnaire administered, 80 were successfully completed and were used for the study. The data collected were subjected to a descriptive statistical analysis using frequency tables, percentages, mean scores, standard deviations, graphs and inferential statistic using the Statistical Package for the Social Sciences, International Business Machine (IBM version 20). The One Way Analysis of Variance procedure was used to test the significance difference of fund utilization of the same libraries in the hypothesis. The hypothesis was therefore retained.

Major Finding

The study revealed that:

- i. Funds allocated to agricultural research institute libraries in Nigeria were properly utilized for services provision except for purchase of computers.
- ii. The extent to which the funds appropriated to agricultural research institute libraries in Nigeria in assisting them to meet their users' needs in respect to services, only three literature search services, reference services and selective dissemination of information services had funds appropriated.

Conclusion

Funds allocated to agricultural research institute libraries in Nigeria were properly utilized. However, the extent to which funds appropriated to agricultural research institute libraries assisted them in meeting their users' needs in respect to services. Only literature search services, reference services and selective dissemination of information services were provided to the users in all the libraries under study. Low budgetary allocation by government constituted a major challenge to the funding of these libraries as high level of inconsistency in budgetary allocation militate against smooth planning and execution of objectives in the libraries, if the challenges of inadequate funding, appropriate budgetary allocation and establishment of the

right channel for fund allocation are adequately addressed, the service delivery of these libraries would probably improve beyond the level it is presently were.

Recommendations

The following recommendations are hereby made based on the findings and conclusions reached for in the study.

1. All funds allocated to the agricultural research institutes libraries in Nigeria should be properly utilized for their respective purposes.
2. The librarian of each agricultural research institute libraries in Nigeria should be a Principal Officer of the respective institute to enable the librarian to have a meaningful understanding of funds allocations.

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