

Security Control and Disaster Preparedness as Panacea for Preservation and Conservation Practices in University Libraries in South-West, Nigeria

Osunrinde, A.A. (PhD)
Ekiti State University Library
Ado Ekiti, Nigeria

Adetunla, B.O.G.
Ekiti State University library
Ado Ekiti, Nigeria
sirbog@yahoo.com

Abstract

Deterioration of library materials is one of the basic challenges confronting the libraries which have become a global phenomenon. It becomes difficult to replace materials that are stolen, mutilated or plagued by flood or fire at this period of economic recession coupled with the dwindling budgetary allocation to the library, libraries should put all necessary measures in place to avoid potential risk. This study investigates security control and disaster preparedness as panacea for preservation and conservation practices in university libraries in South-west, Nigeria. The study adopted a descriptive survey design. A total enumeration technique was used for selecting 308 respondents for the study. Questionnaire was used for data collection and was analyzed using descriptive statistics. The findings revealed that the traditional security method of library porter is more used than the electronic security system. Fire extinguisher and emergency exit are the major disaster plans on ground. The finding further revealed that the library personnel have adequate training in security and disaster management. The study concluded that the libraries should gear towards proper security and disaster preparedness measure to guide against disaster occurrence. Therefore, the study recommended that libraries should map out a comprehensive insurance scheme with any of the reputable insurance broker to reduce possible risk and embrace electronic security measures for effectiveness against theft, mutilation and other vices.

Keywords: preservation practices, conservation practices, libraries, disaster preparedness. Security control

Introduction

The library as a very germane part of any educational institution which is charged with the responsibility of disseminating knowledge to the user community without any discrimination. The holdings of the libraries are evidences of human development which is a reflection of the worth of the mother institution. According to Aina (2004), the library contains information required by different users and this information appears in a variety of formats such as books, serials, maps, compact discs etc. These formats are collectively called information carriers and can be classified into two types namely: print and non-print library materials.

Deterioration of these materials is one of the basic challenges facing the libraries which have become a global phenomenon to which libraries must aggressively respond if the mission of meeting the information needs of their patrons would be achievable in this era of dwindling budgetary allocation to libraries. One of the greatest commitments of the libraries is to link the user to the source of information. Proper dissemination of library materials is only possible when the documents are in good and usable condition. Preserving intellectual and cultural heritage of the library from deterioration becomes the heartbeat of the libraries.

However, some of the causes of deterioration in libraries are wear and tear, shrinkage, cracks, brittleness, warping, bioinfestation, discoloration, abrasion, hole, and dust and dirt accumulation. External causes of deterioration of collections include poor handling or storage, theft or vandalism, fire and flood, pests, pollution, light and incorrect temperature and relative humidity. The greatest causes of colossal loss to library materials are natural disaster (fire, flood, earthquake etc) and human factor (theft, vandalism, mutilation etc) (Walker, 2013).

Furthermore, Jordan (2003) describes preservation and conservation as an umbrella term for an array of activities, principles, practices, and organizations that ensure the usability, longevity, and accessibility of recorded knowledge. These activities include environmental monitoring, security control, care and handling of materials and disaster preparedness and recovery.

Moreso, disaster plan and security measure are essential element of preventive programme in libraries. . Disaster planning is a set of rehearsed actions which minimizes disaster effect of whatever size in the library and will assist in restoring the library and its collections to a useable condition in as short a time as possible. Some of these disaster and security backup plans

include: Regular training on disaster planning, Installation of Smoke detectors, Closed Circuit Camera, Installation of Fire detectors, RFID, Fire extinguishers, 3M security gate, Conduct of regular test on the library building, Provision of emergency exits etc (Alegbeleye, 1993, osayande 2011).

Isaa et.al (2012) pointed out that even though disaster preparedness plan is very essential, it is non existing in Nigerian libraries and The significance of disaster planning in libraries has been extensively emphasized in the works of Harvey (1993), Akussa and Fosu (2001), Odogwu(2008), Sawant (2014), Adekannbi and Wahab (2015). It is against this backdrop that this study investigates security control and disaster preparedness as panacea for preservation and conservation practices in university libraries in south-west, nigeria.

Objective of the Study

The general objective of this study is to investigate the security control and disaster preparedness as panacea for preservation and conservation practices of university libraries in South-West, Nigeria.

The specific objectives are to:

- i. To establish the security measures in place in libraries of the selected university libraries?
- ii. To ascertain the level of disaster preparedness of libraries in the selected university libraries?
- iii. To find out the level of training received by library personnel on security control and disaster preparedness in the selected university libraries?

Research Questions

This study provides answer to the following research questions:

- What are the library security measures in place in libraries in the selected university libraries?
- What is the level of disaster preparedness of libraries in the selected university libraries?
- What is the level of training received by library personnel on security control and disaster preparedness in the selected university libraries?

Scope of the Study

This study seeks to evaluate the preservation and conservation practices among university libraries in the South-West, Nigeria. The libraries include all public and 10 first generation private universities in the South-West. Studying both public and private universities would give a comprehensive study of the preservation and conservation practices among the universities in the South-West, Nigeria.

Literature Review

In any educational institution, the library is charged with the responsibility of keeping the heritage of such institution. For continuing access to the priceless heritage of the library, it must be preserved. One of the major functions of the library is preservation and conservation. Library materials are hygroscopic as they are reactive to moisture, relative humidity whether too high or too low have a number of adverse effects on collections. The expansion and contraction in response to fluctuations cycling in relative humidity causes changes in dimensional and mechanical properties of the materials which accelerates the natural degradation processes. The physical deterioration of information resources, especially paper-based materials has been attributed to factors such as: level of usage, inherent chemical instability, external environmental factors, human agents, chemical agents, biological agents and natural agents (Popoola, 2003; Alegbeleye, 2008). Deterioration may set in through the natural ageing process or as a result of other factors such as chemical composition of the media of information, biological agents, environmental factors, physical agents and improper handling. Also, fire and flood are the greatest cause of degradation to library material. (Akussah, 1994, Alegbeleye, 1996; Jodan, 2003). Preservation is defined in the IFLA Principles for the Care and Handling of Library Material to include “all the managerial and financial considerations including storage and accommodation provisions, staffing levels, policies, techniques, and methods involved in preserving library and archival material and the information contained in them” (IFLA, 2010). Sewant (2014) also defined preservation as activities associated with maintenance of library and archival materials for use either in their original physical form or in some other usable ways. He further re-iterated the several techniques used in preservation and conservation of library materials to include binding, encapsulation, digitization, de-acidification, pest control,

environmental control. Khayundi's (1995) study in eastern and southern Africa, excluding South Africa and Namibia, sought information on stock, buildings, environmental control, preservation facilities, personnel, handling and budgetary provisions. The findings of this study revealed that most collections were not housed in purpose-built buildings and that very few countries had environmental control systems. Though most libraries and archival institutions had preservation facilities such as a bindery, a restoration workshop and photographic laboratory, there was an acute shortage of trained staff in the field of preservation and conservation. Furthermore, the study revealed that mishandling of materials was rife; preservation was given a low budgetary priority; most countries had no policy documents spelling out preservation policies; and lack relevant literature as well as denied staff running preservation programmes the opportunity to update their skills and knowledge. Ovowoh (2010) carried out a study to assess the preservation and conservation programmes and activities in libraries in Nigeria. Findings from their study revealed that there was no written policy in the higher education institutions studied, and decisions on preservation and conservation were arbitrary and inconsistent. Alegbeleye (2006) opined that to savage present preservation issues plaguing the libraries, a proper disaster preparedness backup, recovery plans, security measure and environmental monitoring systems must be put in place as key techniques of preservation and conservation practices.

One of the greatest challenges plaguing the library overtime has been security issues such as stealing of library materials, tearing off pages of textbooks, ink marking of textbooks etc. The security of the huge investments made by the library is a *sine qua non* to the success of the libraries' effort to remain relevant and providing good information service has been the heartbeat of the library (Osayande 2011). Akinfolarin (1992) opined that one of the greatest headaches of librarians since inception is how to ensure the security of library materials, especially against theft, intentional mis-shelving of books, mutilation etc. Security control against these vices becomes essential and according to McComb(2004), it should be done as seamlessly as possible, without any embarrassment and interference with the library's objective of providing a user-friendly environment. Osayande (2011) re-iterates that the traditional ways of manually checking patrons' bags are both inefficient and not user-friendly. He however suggested that a better way

to deal with security in academic libraries is to embrace the electronic security systems. Electronic security systems are devices that are used with the aid of electrical apparatus to secure library materials. They help libraries to control, minimize or avoid library materials against theft and unethical losses (Rajendran & Rathinasabapathy, 2007). Examples of electronic security systems installed in libraries are electronic surveillance camera (CCTV), 3M electronic security systems (electronic security gates), radio frequency identification (RFID) system, perimeter alarm system, etc. a proper security measure can help control these unethical practices in libraries. Greenwood and Mckean (1985) reported that after installing an electronic security system at the University of Kentucky Library, book loss rates had been decreased. Some major electronic security systems that were useful to the library include: electronic surveillance cameras (Closed Circuit Television-CCTV), 3M library security system (electronic gates), Radio Frequency Identification (RFID) system, perimeter alarm system, movement detectors, etc.

More so, another great cause of resources loss in the library is disaster. Alegbeleye (1993) defined disaster as an event that "results in the sudden removal of records and documents from accessibility and use"; stating further that the disaster can be regarded as an occurrence that temporarily or permanently render information contained in document inaccessible. A disaster can be seen as an overwhelming ecological disruption occurring on scale sufficient to require outside assistance. Indeed, disasters are exceptional events which suddenly kill or injure large number of people and damage properties. Looking at disaster in a generic information management context, it can be viewed as any incident which threatens human safety; and/or damages or threatens to damage a library's buildings collection (or items therein), equipment and system. There are varied causes and for that matter classification of disaster. Alegbeleye (1993) also agreed that the simplest and most common are the grouping into natural and man-made categories. They stated further that natural disasters are happenings, over which man has very little or no control and are generally initiated by such events as floods, earthquakes, storms, cyclones and hurricanes; among others. Man- induced disasters include war-time destruction, bombings, rioting, malicious vandalism, arson, negligence, power surges and failures. Irrespective of sources of disasters, the destruction and devastation they cause or threaten to cause to library resources and the provision of library services remain a critical factor in the

management of libraries. He also mentioned two commonly recurring causes of library disasters to include floods and fires. Harvey (1993) opined that the best protection against disaster is to minimize the likelihood of them happening. He suggested that disaster planning should be a must to all libraries. He further defined Disaster planning as a set of rehearsed actions which minimise the use disaster effect, of whatever size in the library and will assist in restoring the library and its collections to a useable condition in as short a time as possible. This restoration plans to include: smoke detector installation, fire extinguisher, emergency exit, constitution of rescue team, training etc. A disaster plan, according to Lyall (1993), is a document which describes the procedures devised to prevent and prepare for disasters, and those proposed to respond to and recover from disasters when they occur. Newey, Lepschi & Croft (2008) identified the objectives of the disaster plan as including to:

1. minimize damage to the collections;
2. recover and repair any damaged collection materials; and
3. Return the library and archival services to normal.

Ngulube (2005) stated that disaster preparedness and security are vital to the preservation and protection of records and library. The significance of disaster planning in libraries and archives is extensively discussed by Harvey (1993), Alegbeleye (1993), Akussa and Fosu (2001), Odogwu(2008) .

Methodology

This study adopted survey research design. This design allowed for data to be collected. The population for this study cut across all categories of personnel in the academic libraries in the South-West, Nigeria. A total of (13) public and (10) private university libraries in South-West Nigeria of 468 library staff was used as the population of this study. Table 3.1 shows the list of academic libraries in South-West, Nigeria.

Table 1. Public University Libraries and Private University Libraries

S/N	Public University Libraries	Private University Libraries
1	Kenneth Dike Library, University of Ibadan, Ibadan.	Caleb University
2	Fatiu Akesode Library, Lagos State University, Ojo.	Pan African University
3	University of Lagos Library, Lagos.	Laz Oti, Babcock University
4	University Library, Federal University of Technology, Akure	Redeemer University
5	Ladoke Akintola University of Technology Library, Ogbomosho	Achiever University
6	Ekiti State University Library, Ado-Ekiti.	Wesley University
7	Nimbe Adedipe Library, University of Agriculture, Abeokuta	Joseph Ayo Babalola University
8	Osun State University (UNIOSUN) Library, Osogbo	Oduduwa University
9	Tai Solarin University of Education, Ijebu-Ode Library	Ajai Crowder University
10	Ondo State University of Science and Tech., Okitipupa	Lead city university
11	Hezekiah Oluwasanmi Libray, Obafemi Awolowo University	Afe Babalola University
12	Adekunle Ajasin University Library, Akungba Akoko	Elizade University
13	Federal University Oye-Ekiti Library, Oye-Ekiti	Adeleke University
	Total	Total

A structured questionnaire was designed and administered to the librarians and para-professionals in the sampled libraries. A total enumeration technique was used to select 308 library workers with over ten (10) years working experience as the respondents. A library staff with over ten (10) years working experience would have been involved in preservation and conservation process at one point or the other. 308 questionnaires were administered but only 292 (82%) questionnaires was returned and found useful for data analysis. Data analysis was

done using relevant descriptive statistics, specifically; percentage distribution and frequency counts, means and standard deviation were generated on most of the items in the questionnaire.

Results and Discussion of Findings

Research question 1: What are the library security measures in place at the studied libraries?

Table 2: Security measures of the studied libraries

Security Measures	SA	A	D	SD	Not Sure	Mean	Std. Deviation
Manual Security System							
Use of Library Porter	81.7	14.1		3.1	1.1	4.7	0.73
Human security guards	73.8	25.8	0.4	-	-	4.7	0.52
Use of security dog	27.5	5.7	18.6	31.6	16.6	3.0	0.51
Electronic Security System							
Electronic security system	41.4	28.7	11.5	6.6	11.9	3.8	0.411
Closed circuit television cameras (CCTV)	42.9	26.7	16.2	2.4	11.7	3.9	0.311
Intruder alarm system	35.4	19.8	25.7	5.1	13.9	3.6	0.421
Security doors	39.7	26.5	14.5	6.4	12.8	3.7	0.413

Table 2 shows the security measures in place at the studied universities, the results shows that the manual security system is the most used measure as against the electronic security system. The library porter and human security guards are the most used with a mean score of 4.7 respectively and low use of security dogs. The study also revealed that Closed circuit television cameras (CCTV) is the most used electronic security system with a mean score of 3.9 followed by security doors and intruder alarm system with a mean score of 3.7 and 3.6 respectively. The finding of this study is in conformity with the previous study of Osanyade (2011) that libraries adopt traditional measures than the electronic measure. He further opined that The traditional ways of manually checking patrons' bags are both inefficient and not user-friendly. A better way to deal with security issues in academic libraries is to embrace the electronic security systems.

That will better ensure an effective security of library materials from theft, mutilation, or other forms of losses.

Research question 2: What is the level of disaster preparedness of the studied libraries

Table 3: Disaster preparedness of the studied libraries

Disaster Preparedness							
Constitution of disaster rescue team	21.0	40.3	13.6	6.6	18.5	3.4	0.40
Regular training on disaster planning	26.9	39.2	7.3	8.2	18.4	3.5	0.43
Installation of Smoke detectors	30.1	30.5	10.4	9.6	19.3	3.4	0.54
Installation of Fire detectors	49.4	22.9	7.1	10.3	10.3	3.9	0.47
Fire extinguishers	66.4	25.0	1.2	4.3	3.1	4.5	0.06
Regular mock disaster response programme by disaster rescue team	27.1	34.0	11.3	8.1	19.4	3.4	0.53
Conduct of regular test on the library building	28.4	32.2	14.4	6.4	18.4	3.5	0.44
Provision of emergency exits	47.2	34.7	5.6	6.0	6.5	4.1	0.211

Also, table 2 has shown the disaster preparedness of the studied libraries, the major backup plans put in place by the studied libraries are fire extinguishers and provision of emergency exits with a mean score of 4.5 and 4.1 respectively while the other recovery plans are neglected. The libraries do not have an effective constituted rescue team who will conduct regular check on library building and organize mock disaster programs. The findings of this study agrees with the previous findings of Abdulwahab et.al (2012)

Research question 3: What is the level of training received by library personnel on disaster preparedness and security control in the library under study?

Table 4: Training received by library personnel on disaster preparedness and security control

Training	SA	A	D	SD	Not Sure	Mean	Std. Deviation
On the job Training	62.3	31.2	4.2	2.3	-	4.5	0.7
Conferences and Seminal attendance	59.2	33.1	4.6	2.3	0.8	4.5	0.8
In- house training	48.7	40.6	6.9	3.4	0.4	4.3	0.8
Training on disaster management	45.0	39.1	1.9	7.4	6.6	4.1	1.2

Training on preservation program	36.3	49.2	1.6	8.6	4.3	4.0	1.1
Training on digitization and automation	49.4	42.8	0.8	6.9	0.00	4.5	1.8

Table 3 reveals a high level of training on security measures and disaster preparedness with the least mean scores of 4.0. Trainings were got on the job, self sponsored training, in-house training etc. The result of this study is contrary to many previous studies such as Arnoult, (1986), Khayundi's (1995) Ovowoh (2010) who reported that there were no personnel trained in preservation and conservation of library materials.

Conclusion and Recommendation

The worth of a library is determined the range and updatedness of her collection. For the library to achieve her aims and objectives, preservation of these collections becomes imperative. One of the greatest challenges of the library over the years has been loss of resources; Security issues and disaster have plagued the libraries so immensely. It becomes difficult to replace materials that are stolen, mutilated or plagued by flood or fire at this period of economic recession coupled with the dwindling budgetary allocation to the library. The libraries should gear towards proper security and disaster preparedness measure to guide against disaster occurrence. The findings of this study has pointed out that the libraries still make use of traditional security measure and the disaster recovery plan is ineffective. Thus the following recommendations are made:

- The libraries should map out a comprehensive insurance scheme with any of the reputable insurance broker to reduce possible risk
- The libraries should embrace electronic security measures for effectiveness against theft, mutilation and other vices.
- A disaster rescue team should be constituted by the libraries to monitor and build a concrete synergy with the necessary agencies such as the fire brigade and the plumbing units of the mother institution.
- The libraries should carry out regular fire drill and mock disaster response programs.

References

- Adekannbi, Janet O. and Wahab, Femi-Wale Wasiu, (2015). "Comparative Analysis of the Preservation and Conservation Techniques of Selected Special and Academic Libraries in Nigeria" *Library Philosophy and Practice (e-journal)*. Paper 1328.
- Aina, L.O. (2004). *Library and information science text for Africa*. Ibadan: Third World Pp. 1,273 and 299.
- Akinfolarin, W. A. (1992). Towards improved security measures in Nigeria university libraries. *African Journal of Library, Archives and Information Science*, 2(1), 51.
- Akussah H (1991). The Preservation of Traditional Library and Archival Materials in the Harsh Ghanaian Environment. *African Journal of Library, Archives and Information Science*, 1 (1): 19-28.
- Akussah, H. (2006). The State of Document Deterioration in the National Archives of Ghana. *African Journal of Library, Archives and Information Science* 16 (1): 1-8.
- Akussah, H. and Fosu, V. (2001) Disaster Management in Academic Libraries in Ghana. *African Journal of Library, Archives and Information Science* 11. 1: 1-16
- Alegbeleye, B. (1993). *Disaster control planning for libraries, archives and electronic data processing centres in Africa*. Ibadan: Option Book and Information Services.
- Harvey, R. (1993). *Preservation in Libraries: Principles, Strategies and Practices for Librarians*, London: Bowker
- Issa, A.O et.al (2012). Disaster Preparedness at the State Public Library, Ilorin, Kwara State, Nigeria. *Library Philosophy and Practice* 2012. Retrieved from <http://unllib.unl.edu/LPP/>
- Jordan, K.S. (2003). Special collections and preservation: In *Encyclopedia of library and information science*. CRC Press.
- Lyall, J. (1993). Staff papers: Disaster planning for libraries and archives; understanding the essential issues. Proceedings of the Pan-African Conference on Preservation and Conservation of Library and Archival Materials, Nairobi, Kenya. IFLA: 103-112
- McComb, M. (2004). *Library security*. Retrieved 23 May 2011 from: <http://www.librisdesign.org/docs/LibrarySecurity.pdf>

- Newey, A., Lepschi B., & Croft, J. (2008). A disaster recovery plan for the Australian National Herbarium Canberra. Centre for Plant Biodiversity Research
- Ngulube, P. (2005). Disaster and security management in public archival institution inESARBIA Region. *African Journal of Library, Archives, and Information Science*. 15 (1): 15-20.
- Olatokun, W.M. (2008). A survey of preservation and conservation practices and Techniques in Nigerian University Libraries. *Library and Information Science Research Electronic Journal* 18(2)
- Osayande, O. (2011). Electronic security systems in academic libraries: A case study of three university libraries in South-West Nigeria. *Chinese Librarianship: an International Electronic Journal*, 32. URL: <http://www.iclc.us/cliej/cl32osayande.pdf>
- Ovowoh, R.O. & Iwhiwhu, B.E. (2010). Preserving Information Bearing Material in Higher Education Institutions in Nigeria. *Library Philosophy and Practice*, 396. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1406&context=libphilprac3rd> September, 2015
- Popoola, S.O. (2003). Preservation and conservation of information resources. Ibadan: Distance Learning Centre.
- Rajendran, L. & Rathinasabapathy,G. (2007). *Role of electronic surveillance and security systemsinacademiclibraries*.Retrieved5May2011from:http://library.igcar.gov.in/readit2007/conpro/s4/S4_2.pdf
- Sewant, S. (2014). A study of preservation and conservation practices in academic libraries in Mumbai. *Anal s of library and information studies*. Vol 61, june 2014. Pp 153-159
- Walker, Alison (2013). Basic Preservation for Library and Archive Collections. London: Preservation Advisory centre retrieved from <http://www.bl.uk/blpac/publicationsleaf.html> on 27th February, 2013.