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### Preservation and Conservation of Library Resources in Bingham University Library, Karu, Nasarawa State, Nigeria

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### 1.1 Introduction

Librarians the world over are tasked with the responsibility of acquiring, processing, disseminating information to users; and due to constant exposure of clients to these materials the rate of degradation increases. Every library is prone to two kinds of deterioration: biological deterioration caused by insects attack and fungi growth or environmental deterioration caused by extreme dampness, wide fluctuations of relative humidity, variations in temperatures,

### Abstract

This research work investigates the preservation and conservation of Library resources in Bingham University Karu, Nasarawa State. This was done by means of questionnaires and observation. The study involved gathering data from professional librarians in university library. The study sought to identify forms of Library resources available in the library, and it was revealed that print resources were predominant. The study also revealed that physical cleaning and dusting, fumigation, binding and photocopying were the major methods of preserving and conserving of the library resources found in the library. Poor funding, lack of preservation policy, and inadequate planning of preservation and conservation of e-resources were *identified as the major challenges of preservation and* conservation of these library resources. Based on these revelations recommendations were made such as provisions of CCTV cameras and alarm, improved funding by the university management, enacting and implementing preservation and conservation policy, creating back up files onsite and off-site including installation of strong anti-virus software.

*Keywords: Preservation, conservation, Library resources, electronic resources, Bingham University* 

light and atmospheric pollutants (Maravilla, 2008). Preservation is concern with maintaining or restoring access to artifacts, document and records through the study, diagnosis, treatment and preservation of decay and damage. While conservation refers to the treatment and repair of individual item to slow decay or restore them to a usable state.

Libraries acquire materials to meet the informational or recreational needs of their clientele. When the material in one's care is allowed to deteriorate unchecked or become

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damaged in anyway, it may be difficult or unavailable for use. It is the responsibility of the library staff to keep these materials in good physical condition so that they are available for users at all times.

Vast quantities of deteriorated books and document have accumulated in many university's libraries especially in the era of economic recession. In order to solve the problem of enormous and ever growing deterioration of books, it is necessary to introduce preservation and conservation services into various university libraries in Nigeria. The function of preservation and conservation of university library information resources in Nigeria is to provide a suitable protection for each items added to the collection and to take action in preserving it for use and for the future generation.

Preservation and conservation of library resources is a field which encompasses not only materials but includes other resources such as photography maps, slides, motion pictures and others. The role of preservation and conservation program will help to protect millions of publication from deterioration in universities libraries especially as education and Nigerian university libraries are facing financial problems arising from reduction in budget allocation.

# **1.2 Brief history of Bingham University Library**

Bingham University Library started with the appointment of, and assumption of duty by the University Librarian, Pastor John O. Arosanyin, in April 2006. Support for the University Library has largely come from Society for International Missions also known as serving in Missions - SIM. Initial financial support through SIM came from Mr. Howard Claassen, an associate of late Dr. Jim Kraakevik, a great supporter himself of our library development. The library has grown from zero level in space, staffing and collection to the current library building with a sitting capacity of 250 users, 34 staff members (Librarians, Library Officers, Library Assistants and other support staff) and a book collection of over 12,000 volumes.

### 1.3 Statement of the Problem

Effective preservation of library and information resources ensures the durability of the information resources (books, journals, documents, photographs, CD-ROMs, etc.) and enables users to have access to the resources at any given time in the library. One of the effective steps any library can take to preserve its holdings is to maintain safe humidity and temperature level, good air quality and controlled light. This move benefits every single item in the collection. Without a good environment books, documents, photographs and all other library materials will become dirty, faded, moldy, brittle or pest-infested and generally deteriorate or even be destroyed. University libraries will not render effective library and information services if their resources are not taken good care of. Therefore, this study aimed to investigate the problem in preservation and conservation of library materials in Bingham University library and proffer solutions

### 1.4 Objective of the Study

The objectives of the study are:

- 1. To identify the available Library resources in Bingham university library.
- 2. To identify methods of preservation and conservation of these Library resources in the University library.
- 3. To identify challenges of preservation and conservation of Library resources in the University library.
- 4. To proffer solutions to the challenges of preservation and conservation of Library resources in the University library.

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### **1.5 Research Questions**

- i. What are the available information resources in the library?
- ii. What are the method of preservation and conservation of these information resources in the library?
- iii. What are the challenges faced in preserving and conserving the information resources in the library.
- iv. What are the possible solution in curbing this challenges of preserving and conserving this information resources in the library.

### 2.1 Literature Review

# **2.2** Concept of Preservation and Conservation

Preservation is everything which contributes to the physical well being of library resources and it includes the protection, maintenance and restoration of library and archive information resources. The term preservation also includes all the managerial and financial considerations such as storage, accommodation provision, staffing levels, policies, Techniques and methods involved in preserving library and archives information resources and Information contained in them.

According to Isah (2003) no librarian of today can shy away from the fact that 'Information World' stands the imminent risk of losing so much of its valuable written heritage through the over increasing deterioration of information resources. As the IFLA-PAC China Centre (2006) puts it, "the core activity on preservation and conservation is to ensure that significant library and archive materials, published and unpublished, in all formats, will be preserved in accessible form for as long as possible." All over the world, nations are increasingly becoming aware of the role played by information resources. The value of information resources was perhaps clearly stated by the International Federation of Library Associations and Institutions (2003) when it stated:

> In no circumstances should information resources be regarded as additional luxury materials but rather they should be considered as necessary components in a fully integrated library services...In developed countries the provision of information resources and their associated equipment's might be regarded as of greater importance than any other things because the level of literacy, oral and visual communication is essential[p.1].

Mnjama (2010) opined that "the documentary heritage which the school libraries house provides the raw materials that allow us to understand, explain and enjoy the visible and invisible world. Access to the past information resources enable us to understand and locate ourselves in the present and give us the opportunity to inform the future. In preserving our shared past, we are preserving the collective memory for future generations." In libraries if past information resources were being preserved, it will, of course, be of great benefits for new generations in having deep knowledge of what had happened in the past.

The importance of preserving library information resources was summed up by Clooman (2001) when he stated that "preservation allows for the continuity of the past with the present and the future". According to the National Preservation Office (2001) "libraries and archives contain an irreplaceable accumulation of human knowledge and experience". Nevertheless, it would be a waste of resources if after institutions such as school libraries have devoted considerable sums of money in acquiring and processing information

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resources and these valuable resources remain inaccessible to scholars and other bona fide users especially teachers, students and school alumni. Therefore the cause and effect of information resources on users necessitates its preservation measures.

However, Anjaiah (2008) stresses that "the words 'preservation' and 'conservation' are often used interchangeably to mean: the process of keeping an object safe from harm or loss, damage, destruction or delay, and maintaining it in a reasonably sound condition for present and future use. He maintained that these two words are different. though interrelated and overlapping connotations. Okonkwo (2009) was not left out as he also defined "preservation" as "the totality of measures for maintaining the integrity of document and the information contained in them which includes all the managerial and financial considerations, storage and accommodation provisions, staffing level policies, techniques and methods involved in safeguarding documentary materials. In preservation consideration is given to every element that promotes the protection of the materials including the housing, storage system and security against such threats as theft, mutilation and poor handling. Preservation is, therefore, a more embracing concept and it includes conservation. However, conservation is preservation at the item level which embraces those activities that improve the condition of the physical object or protect it from damage.

## **2.3 Relation between Preservation and Conservation**

The term 'Conservation' has been defined in the IFLA (2010) principles for the care and handling of library materials as "specific practices taken to slow down deterioration and prolong the life span of an object by direct intervening in its physical or chemical make-up. Preservation generally refers to everything which contributes to the physical well-being and maintenance of collections. These include the protection, maintenance and restoration of library resources. According to Sawant (2014) in his work preservation tends to include conservation, but also comprehends techniques of partial preservation of the physical object (e.g., a new binding), as well as procedures for the substitution of the original artifact materials conversion, whereby the intellectual content of the original is at least partially preserved. Conservation therefore, is one aspect of preservation activity. It implies the active use of preventative measures, or processes to repair damaged material, and ensure the continued existence of individual items.

Furthermore, Sawant, (2014) quoting Srivastava and Kumar (1986) states that though conservation and preservation are used synonymously, technically, these two words have different implications though they are related to each other. The conservation and preservation are the processes of keeping an object safe from harm or loss, damage, destruction or decay and maintaining it in a reasonably sound condition for present and future use. Preservation deals with the regular maintenance aspect whereas conservation deals with the curative treatment. For long preservation has been a great problem for librarians and information managers around the world, but information managers cannot shy away from issues concerning preservation of intellectual properties in order not to stand the imminent risk of losing so much of their valuable resources through deterioration of these resources.

From the above definitions it can concluded that preservation is an act of maintaining, adequate care and handling, back-up with financial considerations as well as storage and good accommodation of both print and non-print information resources.

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This involves formulation of policies meant to safeguard these resources for generation of users. Libraries and professional librarians are charged with the responsibility of ensuring that these resources are not just kept in the library but protected. In other words, preservation and conservation can be used interchangeably to connote planned activity to ensure the safe survival of information resources which include print and non-print materials backup with policies and financial capabilities applied to retard deterioration and ensures its longevity for generation of users.

#### 3.1 Methodology

Survey research design was employed in this study. The sample population of the study was 25 library staff of the university library of Bingham University, Karu made up of eight (8) professional librarians, four (4) professionals and thirteen (13) nonprofessional librarians. The major instrument used to gather data for this study was a structured questionnaire. Out of the 25 questionnaires distributed, 23 (92%) of the questionnaires were returned and used for the study. Unstructured interview and observations were also employed to verify data obtained through the questionnaire. All the professional librarians in the library were involved.

# **3.2** Causes of Deterioration of Library Resources

Preliminary investigation of causes of information resources deterioration in Bingham library reveals as causative agents:

### 1. Biological Agents

i. Micro-organisms-Fungus or moulds, bacterial etc.

- ii. Insects
- iii. Rodents
- iv. Micro-organisms

v. Termites or white Ants

**2. Human factor:** Attitude of the library staff as well as the users of the library towards books as physical objects.

**3. Water:** Water occurs in all the normal state of matter- solid, liquid and gas. It acts as a physical agent of deterioration by causing hygroscopic materials to undergo dimensional changes.

#### 4.1 Data analysis and discussion

The statistical approach employed for this investigation was Frequency tabulation and percentage. It was used to determine the rate of response from the librarians.

Table 1 a: Categories of staff							
Professionals Para-prof		fessionals	essionals Non-professionals		Total	I	
8		4	13		25		
Table 1b: Distribution and Response Rate							
	Distribution		Return Rate		(%) Percentage		
	25		23		92		

#### Table 2: Availability on Information R esources

Table 2. Availability on Information R cources					
Information	Frequency	<b>Trequency</b> Percentage			
resources Available					
Books	9	90	1 <sup>st</sup>		
Magazines	9	90	1 <sup>st</sup>		
Dissertations	9	90	1 <sup>st</sup>		
Conference paper	9	90	1 <sup>st</sup>		
Annual report	6	60	$4^{\text{th}}$		
Bulletins	5	50	3 <sup>rd</sup>		
E-journals	9	90	1 <sup>st</sup>		
E-magazine	4	40	5 <sup>th</sup>		
E-reference	3	30	6 <sup>th</sup>		
E-Annuals	3	30	6 <sup>th</sup>		
E-book	8	80	$2^{nd}$		

Table 2 shows the percentage responses of the information resources in Bingham University Library under study. From the table it was observed that books, magazines, projects, dissertations and ejournals were found to have a frequency of 9 each. This result gives a percentage availability of 90% each. A frequency of 8 (80%) was identified with e-books. While annuals reports had a frequency of 6 (60%), also conference papers and bulletins both had 5(50%) with e-magazines, identified with a frequency of 4(40%), while e-references and e-annuals both had a frequency of 3(30%).

From the result, it can be seen that books, magazines, projects, dissertations and e-journals ranked the highest with percentage availability of 90% each, followed by e-books which is 80%, annual report ranked third with a percentage availability of60%, followed by conference paper and bulletins ranked the forth with 50%, while e-magazine had 40% and finally e-reference and e-annual report ranking sixth with 30%.

S/No	Methods of Preservation and Conservation	Frequency	Percentage	Rank
1	Binding	8	80	$2^{nd}$
	Laminating	5	50	4 <sup>th</sup>
	Jacketing	1	10	6 <sup>th</sup>
	Digitalization	4	40	5 <sup>th</sup>
	Photocopying	8	80	$2^{nd}$
	De-acidification	0	0	-
	Cleaning and Dusting	9	90	$1^{st}$
	Fumigation	7	70	3 <sup>rd</sup>

 Table 3 Preservation and Conservation Methods

Table 3 shows the percentage responses of the librarian on methods of preserving and conserving information resources in Bingham University library under study. The following was observed: cleaning and dusting was found to have a frequency of 9(90%). A frequency of 8(80%) was identified binding and photocopying while fumigation had a frequency of 7(70%). Also lamination was identified with a frequency of 5(50%). Digitalization had a frequency of 4(40%) and jacketing had a frequency of 1(10%).

From the result it is clear that cleaning and dusting ranked the highest with a percentage of 9(90%) followed by binding and photocopying which is 8(80%), then fumigation ranked third with a percentage of 7(70%), followed by laminating which is 5(50%), while digitalization had 4(40%) and finally jacketing ranking sixth with just 1(10%).

S/No	Challenges of Preservation and	Frequency	Percentage	Rank
	<b>Conservation of Information</b>	(Response		
	Resources	Rate)		
1	Damage by insects	3	30	3 <sup>rd</sup>
2	Book Theft	4	40	$2^{nd}$
3	Mutilation	8	80	$1^{st}$
4	Temperature and	3	30	3 <sup>rd</sup>
	Relative humidity			
5	Poor Funding of library	8	80	$1^{st}$
6	Frequency and Varied Virus attack on	3	30	3 <sup>rd</sup>
	Digital Resources			
7	Lack of Preservation	8	80	$1^{st}$
	and Conservation policy			
8	Fragility/Vulnerability	2	20	$4^{\text{th}}$
	of Digital Document			
9	Insufficient Planning of Preservation	8	80	1 <sup>st</sup>
	and Conservation of Digital Library			
	Resources			

**Table 4 Challenges of Preservation and Conservation of Information Resources** 

Table 4 shows the percentage responses of the Librarians on problems of preservation and conservation of information resources in Bingham University Library under study. From the table the following was observed: mutilation of books, poor funding library, lack of preservation and conservation policy, and insufficient planning of preservation of digital library resources were found to have frequency of 8 each. This result gives a percentage of 80% each. A frequency of 4(40%) was identified for book theft, while books damaged by insects, temperature/ relative humidity as well as frequent and varied virus attack on digital resources had a frequency of 3 (30%) each. Finally,

fragility/vulnerability of digital document had a frequency of 2(20%).

From the result, it can be concluded that mutilation of books, poor funding of library, lack of preservation and conservation policy, and insufficient planning of preservation and conservation of digital library resources were ranked the highest with a percentage of 80% each, followed by book theft which is 40%, while books damaged by insects, temperature/humidity and frequent and varied virus attack on digital resources with a percentage of 30%. Finally, fragility/vulnerability of digital documents had a percentage of 20%.

 Solution of Preservation and Conservation of Information Resources

 S/N
 Possible solution in preservation and University

S/N	Possible solution in preservation and	Frequency	Percentage	Rank
	conservation of information			
	resources			
1	Regular Fumigation	7	70	3 <sup>rd</sup>
2	Marsh Wire	2	20	$6^{\text{th}}$
3	Detective camera and Alarm	6	60	4 <sup>th</sup>
4	Air Regulators/ Air Condition	6	60	4 <sup>th</sup>
5	Improve Funding of the library by the	8	80	$2^{nd}$
	University Management			
6	Installation of strong Anti- Virus by the	8	80	$2^{nd}$
	University Library			
7	Enacting and Implementing	9	90	1 <sup>st</sup>
	Preservation and Conservation Policy			
8	Creating On-The Site and Off-The Site	5	50	$5^{\text{th}}$
	Back-Up Files			
9	Adequate Environment Control, and	8	80	$2^{nd}$
	Dusting of library Materials			

Table 5 shows the responses of librarians on the possible solutions of preservation and conservation of information resources in Bingham University under study. From the table, it was observed that enacting and implementing preservation and conservation policy have a frequency of 9 with a percentage of 90%; installation of strong anti-virus by the University, improved funding by the University management, adequate environment control/cleaning and dusting off library materials have a frequency of 8(8%), each. While regular fumigation had a frequency of 7(70%). Also detective cameras/alarm and air regulators/air conditions both had 6(60%), with creating onthe-site and off-site back-up files identified with a frequency of 5(50%). Finally, marsh wire had a frequency of 2(20%).

From the result, it is revealed that enacting and implementing preservation and conservation policy have ranked the highest with a percentage of 90%, followed by installation of strong anti-virus by the University. Improved funding by the University management, adequate environment control/cleaning and dusting of library materials have a frequency of 80% each. Then regular fumigation ranked thirdly with a percentage of 70%, followed by detective cameras/alarm and air regulators/air conditions ranked fourth with 60% while creating on-the-site and off-the site back-up files identified with a frequency of 50% and finally marsh wire ranking the sixth with 20%.

### 5.1 Summary of Finding

From the findings of this study, several discoveries were made which greatly affected the preservation and conservation of information resource, some of these problems are:

1. Mutilation of information resources especially print resources posed a major treats to the conservation of this resources. The study revealed that malhanding of these resources by users was also a concern.

- 2. Insufficient fund for provision of information resources was experience; talk more of funds to embark on modern preservation conservation techniques.
- 3. Preservation and conservation policy was lacking in the library. This policy would have accommodated modern preservation conservation policy such as digitization and institutional repository policy.
- 4. Inadequate planning of preserving and conserving of the available e-resources in the library was also revealed. In essence, no strong anti-virus software is installed in the systems to preserved downloaded e-documents for future users use.

### Conclusion

The price of acquiring information resources is sky-rocketing and it is almost impossible acquiring the right resource at the right time. It is therefore of a paramount importance to preserve and conserve the ones already acquired.

In Bingham University Library, preservation and Conservation of Library resources needs to be improved upon as some of its print Library resources are being mutilated by users, poor funding on the side of the University management, lack of preservation policy, and inadequate planning of preserving and Conserving of library eresources were identified as the major challenges of preservation and Conservation of these library resources.

Professional and non-professional staff should be encouraged to undergo training in the area of preservation and conservation with the commitment of university management, this include (individuals and corporate organization). All

over the world today people are becoming aware of the role played by information resources and the value placed on these resources, therefore the need to preserve them for posterity. Preservation and conservation of information resources in any institution is very important so as to cope with the services rendered to users. It therefore is obligation that management and library administrators ensure that these resources are protected from destruction, this will bring about the continued access to knowledge, bring relevance to users and meet organizational objective.

### Recommendation

From the summary of the study finding and conclusion drawn, the following recommendations were therefore made:

- 1. Library management should take preservation and conservation very serious, especially modern way of surveillance such as surveillance camera, electronic detective and alarm in addition to other sample such as bar code on print resources.
- 2. Institutional libraries especially the one studied, should impress it upon its parent institution management to provide adequate funds for the library, especially for the purpose of preservation and conservation of information resources. The management should also ensure the judicious use of the allocation funds by the library administration.
- 3. Fashioning policy concerning preservation and conservation, when enacted and implemented will prove a guiding principle that will prolong the life span of the available information resources.
- 4. Strong anti-virus such as Avast, Norton, AVG, etc. should be installed in the computer systems especially those

containing downloaded and copied eresources. This will prevent the eresources from being destroyed by virus. This is a way of preserving and conserving the available e-resources for present and future use.

All these would enhance effective and efficient library services to users in Bingham University library.

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