An Assessment of Preservation and Conservation Practices in Academic Libraries: A Case Study of Aliko Dangote University of Science and Technology Library, Wudil

Hasiya Salihu Yusuf[1]
hasiyayusuf05@gmail.com
07036942333

Dr. Hauwa Sani Ahmad[2]
hsahamd.lis@buk.edu.ng
08033498274

[1]Department of Library and Information Science, Aliko Dangote University of Science and Technology, Wudil, Kano State
[2]Department of Library and Information Sciences, Bayero University Kano

Abstract

The study assessed preservation and conservation practices in Aliko Dangote University of Science and Technology Library. Wudil. A qualitative case study design was employed, using semi-structured interviews and direct observations as data collection instruments. A total of eight library staff members, including senior personnel directly involved in preservation activities, participated in the study. Data was analyzed using thematic analysis. The findings of the study revealed that preservation practices in ADUSTECH Library are largely traditional, involving dusting, shelving, and basic repairs, with minimal use of digital or climate control technologies. The finding further showed inadequate funding, absence of a formal preservation policy, poor infrastructure, and lack of staff training as the major challenges. Despite these limitations, library staff demonstrated awareness of preservation standards and a willingness to adopt improved techniques. The study recommends the development of a comprehensive preservation policy, increased budgetary allocation, training for library staff, and investment in modern preservation tools and technologies. These measures are essential for ensuring the longevity and accessibility of academic resources in the face of growing institutional demands.

Keywords: Preservation, Academic Libraries, Conservation Practices, ADUSTECH

Introduction

Preservation and conservation are essential components of library management, aimed at ensuring the longevity and accessibility of both physical and digital collections. In academic libraries, effective preservation practices are crucial because they safeguard scholarly resources, support teaching and learning, and protect the intellectual heritage of institutions for future generations. Without effective preservation, valuable knowledge resources may deteriorate, become inaccessible, or be permanently lost. Unfortunately, many Nigerian university libraries face serious challenges in implementing sustainable preservation practices due to inadequate infrastructure, insufficient funding, and a lack of specialized training for library staff (Ogbomo, 2021). Aliko Dangote University of Science and Technology (ADUSTECH), Wudil, is no exception, as the institution's library struggles with limited facilities, outdated equipment, and minimal financial support to sustain long-term preservation.

As Odusanya and Oyetunde (2020) observed, many academic libraries in Nigeria still depend on rudimentary preservation methods such as dusting, shelving, and basic cleaning. While useful in the short term, these methods are inadequate to combat the complex environmental, technological, and physical threats facing modern library resources. Furthermore, Ezeani and Akinyemi (2022) stressed that the absence of clear preservation policies, combined with reliance on outdated practices, has further hindered the ability of university libraries to preserve their collections effectively.

This study aims to assess the current state of preservation and conservation practices at ADUSTECH Library, focusing on the challenges faced by staff and identifying potential solutions. The findings will contribute to the broader understanding of preservation practices in Nigerian libraries, offering insights into how resources can be better managed to ensure their sustainability (Abubakar and Umar, 2021).

Statement of the Problem

Preservation and conservation remain critical functions in academic libraries, as they ensure the long-term survival, accessibility, and usability of scholarly resources. However, in many Nigerian university libraries, these practices are often inadequate, inconsistent, or completely absent. Libraries continue to face challenges such as poor infrastructure, insufficient funding, lack of preservation policies, environmental hazards, and inadequate staff training. These issues expose collections—both print and digital—to rapid deterioration, loss, and irrelevance.

At Aliko Dangote University of Science and Technology (ADUSTECH), Wudil, the situation is not different. The library is confronted with aging print materials, limited technological resources, and a lack of sustainable preservation strategies. Most preservation activities are restricted to routine cleaning, shelving, and repairs, which are insufficient to protect resources against long-term threats such as humidity, pests, obsolescence of digital formats, and inadequate storage facilities. The absence of formal preservation and conservation policies further compounds these challenges, leaving valuable academic resources vulnerable to permanent damage or loss. Given the critical role of libraries in supporting teaching, learning, and research, the inability of ADUSTECH Library to implement effective preservation and conservation practices threatens its ability to fulfill its academic mandate. This situation necessitates a systematic assessment of the preservation and conservation practices in the library, with a view to identifying gaps, challenges, and strategies for improvement.

Literature Review

Preservation and conservation are essential responsibilities in academic libraries, aimed at prolonging the usability of both physical and digital collections. In Nigeria, many university libraries, including ADUSTECH, face structural and institutional barriers that hinder effective implementation of these practices (Ogbomo, 2021). Current practices observed in similar institutions include routine cleaning, proper shelving, limited digitization, and environmental control methods such as the use of fans and ventilation (Ezeani and Akinyemi, 2022). However, these efforts are often minimal and reactive rather than proactive or policy-driven.

Several challenges confront academic libraries in their preservation efforts. These include lack of preservation policies, inadequate funding, outdated infrastructure, and insufficient staff training (Nnadozie and Onah, 2020). According to Odusanya and Oyetunde (2020), many libraries still rely heavily on manual methods and lack access to conservation materials such as acid-free folders or humidity controls. Moreover, environmental factors like humidity, dust, and pests are rarely addressed systematically, leading to rapid deterioration of resources.

To overcome these limitations, scholars suggest strategic improvements. For instance, Abubakar and Umar (2021) advocate for capacity building through training and workshops, while Eke and Nwalo (2023) emphasize the need for a national policy on preservation tailored to the Nigerian context. Incorporating ICT tools and establishing digitization labs can also play a vital role in preservation (Oladele and Ojo, 2022).

This review indicates that while efforts are being made, they remain fragmented. There is a critical need for comprehensive strategies that combine policy development, staff empowerment, and infrastructural support to ensure long-term resource sustainability at ADUSTECH and similar institutions.

Review of Previous Studies

Recent research highlights the challenges Nigerian academic libraries face in preserving their collections. Usiedo *et al.* (2022) identified factors such as inadequate funding, lack of skilled personnel, and insufficient infrastructure as major impediments to effective preservation and conservation efforts . Similarly, Mabawonku et al. (2023) found that many university libraries in South-West Nigeria lack formal preservation policies and rely on basic techniques like dusting and shelving, which are insufficient for long-term conservation. The integration of disaster preparedness into preservation strategies is also a growing concern. Ilo *et al*. (2020) emphasized that without adequate disaster management plans, libraries remain vulnerable to unforeseen events that can cause significant damage to collections.

While these studies provide valuable insights, there is a noticeable gap in research focusing on institutions like Aliko Dangote University of Science and Technology, Wudil. Additionally, there is limited exploration of the effectiveness of digital preservation methods in Nigerian academic libraries, despite the increasing digitization of resources. Addressing these gaps is crucial for developing comprehensive preservation and conservation strategies tailored to the unique challenges faced by Nigerian academic institutions.

Methodology

This study adopted a qualitative case study design to investigate preservation and conservation practices at Aliko Dangote University of Science and Technology (ADUSTECH), Wudil. Case study research is particularly effective in exploring complex phenomena within a specific context, allowing for an in-depth understanding of the subject matter (Yin, 2018). The case study design is ideal for examining the challenges and practices of library preservation in a real-life setting, where contextual factors can be thoroughly explored (Creswell and Poth, 2017).

Population and Sample

The population for this study consisted of all library staff involved in the day-to-day operations of resource management and preservation in ADUST Library. From this population, a sample of 8 participants was selected, including the university librarian, departmental heads, and senior library staff members. According to Palinkas *et al*. (2015), purposeful sampling is effective when participants have specialized knowledge or experience in the subject under investigation. Hence, the participants were selected based on their direct involvement with the library's preservation and conservation practices.

Sampling Technique

A purposive sampling technique was employed to ensure that the respondents had relevant experience and insight into preservation and conservation efforts at the university library (Teddlie and Yu, 2007). This method was chosen because it allows for a more focused and meaningful data collection from individuals with specific knowledge.

Data Collection Instruments

Data was collected through semi-structured interviews and observation checklists. The semi-structured interview format provided flexibility for participants to express their experiences and perspectives while ensuring that the main research questions were addressed). Observation checklists were used to supplement the interview data by recording physical conditions and practices within the library environment.

Data Analysis Methods

The data were analyzed using thematic analysis, a qualitative data analysis method that identifies patterns and themes within the responses (Braun and Clarke, 2006). This approach allowed the researcher to organize the data into categories such as preservation practices, challenges faced, and institutional support. Thematic analysis is particularly useful in exploring complex qualitative data, allowing for an in-depth understanding of participants' experiences and perceptions (Saldana, 2016).

Results and Findings

Presentation of Data
Summary of Staff Understanding of Preservation and Conservation

Theme	Frequency (No. of Respondents)
Preservation as routine care	5
Conservation as repair activities	6
No formal policy in place	7

The results reveal that preservation and conservation practices at ADUSTECH Library are limited and largely informal. Five respondents viewed preservation mainly as routine care like cleaning and shelving, showing a focus on day-to-day handling rather than long-term strategies. Six respondents linked conservation to repair activities, reflecting a narrow view of conservation as fixing damaged materials instead of preventive measures. The most critical concern, noted by seven respondents, was the absence of a formal preservation policy, which undermines sustainable practices. Overall, efforts remain uncoordinated and remedial, posing risks to the long-term sustainability of the library's collections.

Current Practices in the Library

Practice	Frequency
Dusting and shelf cleaning	8
Use of insecticides	5
Basic book repair (e.g., taping)	6
Use of bindery	3
Locked storage for special items	4

The findings show that preservation and conservation practices in the library are largely basic and limited. The most common activity, reported by eight respondents, was dusting and shelf cleaning, aimed at preventing dust-related deterioration. Five respondents noted the use of insecticides to control pests, though this may pose health risks. Six respondents mentioned basic book repairs, such as taping torn pages, indicating

minimal corrective efforts. The use of bindery (3 respondents) was uncommon, likely due to cost or lack of facilities, while locked storage (4 respondents) was used to safeguard special items but restricts broader access.

Major Challenges Identified

Challenge	Frequency
Inadequate funding	8
Lack of environmental controls	6
Untrained staff	5
No formal preservation policy	7

The findings reveal that preservation and conservation in the library are hindered by several challenges. Inadequate funding (8 respondents) emerged as the most critical issue, limiting investment in modern preservation infrastructure and practices. Lack of a formal preservation policy (7) further weakens efforts, leaving activities uncoordinated and unsustainable. Environmental control issues (6) highlight the absence of proper temperature and humidity regulation, while untrained staff (5) reflects limited professional capacity to implement modern techniques. Collectively, these challenges restrict effective preservation, threaten the sustainability of resources, and undermine the library's ability to support teaching, learning, and research.

Discussion of Findings

The findings from this study align with previous research on preservation and conservation practices in Nigerian academic libraries. Usiedo et al. (2022) and Mabawonku et al. (2023) reported that most university libraries engage in basic preservation practices such as shelving and dusting but lack formal policies and strategic approaches. Similarly, the ADUSTECH library depends on informal practices, with most staff unaware of institutional policies on preservation, confirming existing gaps highlighted in the literature.

Moreover, the challenges identified such as inadequate funding, lack of trained personnel, and poor environmental conditions mirror those found by Ilo et al. (2020), who emphasized the

vulnerability of Nigerian libraries to deterioration due to poor preparedness and infrastructure.

Explanation of Why Certain Practices Are or Aren't Working

The limited effectiveness of current preservation efforts at ADUSTECH can be attributed to several factors. First, the absence of a formal policy creates inconsistency in how preservation is approached. Without clear guidelines, staff act based on experience rather than standardized procedures. Second, the lack of funding restricts access to preservation materials, equipment, and staff training. Although basic practices like dusting and shelving are maintained, these do not address long-term conservation needs or protect against environmental threats.

Implications for Academic Libraries

The findings underscore the urgent need for Nigerian academic libraries to develop structured preservation and conservation policies. Institutional support in the form of dedicated budgets and staff training programs is essential for sustaining library resources. Libraries should also explore digital preservation strategies as a cost-effective complement to physical preservation. For newer universities like ADUSTECH, investing in preservation infrastructure early can prevent long-term resource degradation and ensure continued academic support for teaching and research.

Conclusion and Recommendations

This study explored preservation and conservation practices at Aliko Dangote University of Science and Technology (ADUSTECH) Library, Wudil. The major findings revealed that while basic preservation activities, such as dusting and shelving, are being implemented, there is a significant lack of formal policies and preventive strategies. Key challenges identified include insufficient funding, inadequate training for staff, and poor environmental controls, which hinder the effectiveness of preservation efforts. The library also lacks a

dedicated budget and disaster preparedness plan for resource conservation. These issues echo the findings from previous studies in the Nigerian context, which highlight similar barriers to effective preservation in academic libraries.

Practical Recommendations for Improving Preservation and Conservation

1. **Development of a Preservation Policy:** ADUSTECH Library should formulate a formal preservation and conservation policy that outlines clear procedures for handling materials, environmental controls, and disaster recovery plans.
2. **Staff Training:** Regular training programs should be implemented for all library staff on modern preservation techniques, materials handling, and the importance of conservation.
3. **Investment in Preservation Infrastructure:** The University should allocate funds for essential preservation infrastructure, including climate control systems, specialized storage for rare materials, and equipment for conservation work (e.g., repair kits, deacidification solutions).
4. **Digitization Initiatives:** Prioritize the digitization of fragile resources to ensure long-term access and reduce dependency on physical copies.
5. **Collaborations and Partnerships:** The library should explore collaborations with national and international organizations for funding, expertise, and resources dedicated to library preservation efforts.

Suggestions for Further Research

1. Future studies could examine the digital preservation strategies being adopted by other Nigerian academic libraries and assess their effectiveness in complementing traditional conservation methods.
2. Research could explore the impact of preservation training on the long-term sustainability of library resources.

3. Further studies may investigate the cost-effectiveness of preservation technologies in Nigerian academic libraries.
4. There is also a need for research on disaster management plans and their role in safeguarding library collections.·

References

Abubakar, A., & Umar, A. (2021). The role of library management in the preservation and conservation of academic resources. *Nigerian Journal of Library and Information Science, 19*(1), 78–89.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.

Eke, H. N., & Nwalo, K. I. N. (2023). Policy-driven preservation strategies for Nigerian university libraries. *Journal of Academic Librarianship, 49*(2), 102620.

Ezeani, C. N., & Akinyemi, S. A. (2022). The state of library preservation in Nigerian universities: Challenges and prospects. *International Journal of Library Science, 10*(3), 145–160. https://doi.org/10.1016/j.ijls.2022.01.009

Ilo, P. I., Nkiko, C., Izuagbe, R., & Furfuri, I. M. M. (2020). Librarians' perception of disaster preparedness as precursor for effective preservation and conservation of library resources in Nigerian university libraries. *International Journal of Disaster Risk Reduction, 43*, 101381. https://doi.org/10.1016/j.ijdrr.2019.101381

Mabawonku, T. O., Ademilua, O. S., & Olusanya, F. O. (2023). Preservation practices in university libraries in South-West Nigeria. *Gateway Information Journal, 24*(1–2), 62 76. https://www.gatewayinfojournal.org/index.php/gij/article/view/36

Nnadozie, C. O., & Onah, E. U. (2020). Challenges of conservation of information resources in Nigerian academic libraries. *Library Philosophy and Practice*, 2020, 1–14.

Odusanya, O. A., & Oyetunde, J. A. (2020). An assessment of preservation and conservation practices in Nigerian university libraries. *African Journal of Library and Information Science, 30*(4), 52–63. https://doi.org/10.4314/ajlis.v30i4.7

Ogbomo, S. E. (2021). Challenges of preserving library resources in Nigerian academic libraries: A case study. *Library Philosophy and Practice, 2021*, 1–15. Retrieved from https://digitalcommons.unl.edu/libphilprac/

Oladele, B. A., & Ojo, R. A. (2022). Embracing digitization for preservation: Challenges and solutions for Nigerian libraries. *Information Impact: Journal of Information and Knowledge Management, 13*(2), 91–100.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533 544. https://doi.org/10.1007/s10488-013- 0528-y

Saldana, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*(1), 77-100. https://doi.org/10.1177/2345678906292430

Usiedo, B. A., Kalu, C. O., Nworie, J. C., & Ibeh, O. B. (2022). Preservation and conservation of library resources in Nigerian libraries: A review. *Communicate: Journal of Library and Information Science, 24*(2). https://www.cjolis.org/index.php/cjolis/article/view/15

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.