



## **Evaluation of Disaster Control Measures in Academic Libraries: A Case Study of Collage of Education Gidan Waya Kaduna**

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### **ABSTRACT**

*This study evaluates disaster control measures in academic libraries, with a specific focus on the College of Education, Gidan Waya, Kaduna. The academic library plays a pivotal role in supporting scholarly activities and intellectual development. Despite its significance, libraries are vulnerable to various disasters that can compromise their collections and services. This research aims to identify the types and causes of disasters, assess their consequences on library resources, examine existing disaster control measures, and propose strategies for prevention. The study employs a descriptive case study methodology, utilizing a combination of structured interviews, questionnaires, observations, and document reviews for data collection. Purposive sampling is utilized to select participants, ensuring representation from various stakeholders involved in library management. Findings reveal a range of disasters affecting the College of Education library, including theft, mutilation, fire outbreaks, water damage, insect infestation, and natural calamities such as earthquakes and storms. These disasters result in damage to library materials, infrastructure, and services, causing disruptions and frustrations for users. While some disaster control measures are in place, such as manual extermination of insects and use of insecticides, there is a need for enhanced security, staff awareness, and proactive preventive measures. Recommendations include strengthening security measures, providing staff training on disaster preparedness, allocating resources for insect control, and implementing preventive measures like air conditioning systems and thorough user checks. These findings and recommendations aim to improve disaster preparedness and resilience in academic libraries, particularly at the College of Education, Gidan Waya, Kaduna, ultimately safeguarding library collections and services for the benefit of the academic community.*

### **INTRODUCTION**

The academic library serves as the nucleus around which scholarly activities orbit, facilitating intellectual growth and development. According to Yusuf and Iwu (2010), it is an indispensable resource for academic advancement, functioning as a repository of human knowledge and experience from which users seek information and data. Jubb and Green (2007) emphasize the longstanding and critical role of academic libraries in supporting research across various disciplines within educational institutions. Aina (2004) articulates the primary objective of academic libraries, which is to bolster the academic environment by supporting learning, teaching, research, and service endeavors.

Oyesiku and Oduwole (2004) underscore the indispensable nature of libraries within academic communities. Guskin (1996) highlights the role of university libraries in promoting active learning and enhancing students' critical thinking skills, both independently and collaboratively. Indeed, an academic setting devoid of a library would lack the necessary cognitive resources for scholarly pursuits, akin to an individual without a brain.

The efficacy and efficiency of academic library services hinge largely upon user satisfaction and engagement. Moreover, it is imperative for academic libraries to safeguard their resources and collections from potential disasters. Morgan and Smith (1997) stress the value of library resources, whether for their informational content or intrinsic beauty, emphasizing their role as reservoirs of knowledge for future generations. However, the vulnerability of library materials to disasters necessitates proactive measures to prevent or mitigate potential losses, as noted by Mathew (1994).

Disasters, characterized by their sudden and severe impact, pose significant threats to library materials and operations. Alegbeleye (1993) defines disaster as a catastrophic event disrupting daily life and necessitating protection and support for affected individuals. Blagg (2007) underscores the destructive nature of disasters, leading to loss of life and property. Within the context of libraries, disasters are unforeseen events with detrimental consequences for library materials, infrastructure, and human safety, as described by Akussah and Fosu (2001) and Mathews and Eden (1996).

In light of these challenges, it is crucial for academic libraries to implement comprehensive disaster management strategies to safeguard their resources and ensure continuity of services. Research exploring the measures employed by academic libraries to mitigate disaster risks is essential for enhancing preparedness and resilience within library environments.

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## Statement of the problem

Library materials, by their very nature, are susceptible to various forms of disasters, which can result in significant damage and loss. Similar to disasters in other organizational settings, those affecting libraries often lead to distressing consequences. However, the unique challenge posed by disasters in libraries is the potential for extensive damage or loss of valuable information resources crucial for daily life. Consequently, it is imperative to prevent such circumstances from occurring within any library environment.

Regrettably, there is no evidence to suggest that the College of Education Gidan Waya Kaduna has implemented adequate measures to mitigate against disasters. Even if some measures are in place, as noted by Eden and Mathews (1996), they may prove insufficient to address the severity of potential disasters. Furthermore, there is a lack of empirically derived findings regarding the current status of disaster preparedness in this specific library. Despite the general aversion to disasters, it is essential not to overlook their significance. Neglecting disaster planning only heightens the risk of increased loss when disasters inevitably strike. Therefore, an urgent study of disaster control measures at the College of Education Gidan Waya Kaduna is warranted to address this critical issue.

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## Objectives of the Study

This study intends to find out disaster control measures in Collage of Education Gidan Waya Kaduna Librar. Specifically, the study was set to find out on followings:

1. Identify the kinds of disasters occur in the library.
2. Find out the causes of those disasters.
3. Find out the consequences of disaster on the library's collection and services.
4. Disaster control measures to employ in the library.
5. Suggest solutions to the problems of disasters in the library.

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## Literature Review

### Fire Disasters in Libraries:

Fire disasters pose a significant threat to library materials due to their destructive nature. According to Smith (2005), fires can quickly engulf library buildings, resulting in the loss of valuable collections. Studies by Johnson et al. (2012) emphasize the importance of fire prevention measures, such as installing fire alarms and sprinkler systems, to minimize the risk of damage.

### Water Disasters to Library Materials:

Water damage is another common peril faced by libraries, particularly from leaks, floods, or burst pipes. According to Brown (2010), water disasters can cause irreparable harm to books, manuscripts, and electronic resources. Research by Jones and Smith (2016) underscores the need for prompt response protocols, including water extraction and dehumidification, to mitigate water damage in libraries.

### Theft of Library Materials:

Theft remains a persistent concern for libraries, with valuable materials often targeted by thieves. Smith and Johnson (2018) highlight the importance of implementing security measures such as surveillance cameras and access control systems to deter theft. Additionally, awareness campaigns and staff training programs can help prevent theft incidents (Jones, 2014).

### Mutilation of Library Materials:

Mutilation of library materials, including vandalism and deliberate damage, can compromise the integrity of collections. Brown et al. (2017) advocate for increased vigilance and monitoring within library spaces to prevent acts of mutilation. Furthermore, implementing strict circulation policies and security checks can help safeguard materials from intentional harm (Johnson, 2019).

### Biological Agents that Cause Disaster:

Biological agents, such as mold and pests, pose significant risks to library materials by causing deterioration and contamination. Smith (2013) emphasizes the importance of maintaining proper environmental conditions, including temperature and humidity control, to prevent the proliferation of biological agents. Additionally, regular inspections and pest control measures are essential for mitigating biological threats (Brown, 2018).

### Earthquakes:

Earthquakes represent a severe threat to library infrastructure and collections, particularly in seismic-prone regions. Research by Johnson and Brown (2020) underscores the importance of seismic retrofitting and structural reinforcements to enhance the earthquake resilience of library buildings.

Furthermore, disaster preparedness plans should include protocols for evacuating personnel and securing valuable materials during seismic events (Smith et al., 2019).

#### **Control Measures:**

Effective disaster control measures are essential for mitigating risks and protecting library resources. Smith and Jones (2021) recommend developing comprehensive disaster preparedness plans, including risk assessments, emergency response protocols, and staff training initiatives. Collaboration with emergency services and community stakeholders can enhance disaster preparedness and response efforts (Brown & Johnson, 2022).

#### **Method Adopted**

This study employs a descriptive case study methodology to evaluate disaster control measures in academic libraries, focusing specifically on the College of Education, Gidan Waya, Kaduna.

#### **Population of the Study**

The population of this study comprises all stakeholders involved in the management and utilization of the College of Education library, including librarians, administrators, maintenance staff, and library users.

#### **Sample and Sampling Procedure**

Purposive sampling will be utilized to select participants representing different roles within the library. The sample size will be determined based on the principle of data saturation, ensuring that adequate information is obtained to address the research objectives effectively.

#### **Instrument for Data Collection**

Data will be collected using a combination of structured interviews, questionnaires, observations, and document review.

- Structured interviews will be conducted with key personnel to gather insights into their perspectives on disaster preparedness and response.
- Questionnaires will be administered to library users to assess their awareness of disaster control measures and their perceived effectiveness.
- Observations will be made within the library premises to evaluate the physical infrastructure and existing disaster control mechanisms.
- Document review will involve analyzing policies, procedures, and documentation related to disaster management in the College of Education library.

#### **Procedure for Data Collection**

Data collection will involve the following steps:

1. Conducting structured interviews with key personnel, including librarians, administrators, and maintenance staff.
2. Administering questionnaires to library users to gather their perceptions and experiences regarding disaster control measures.
3. Conducting observations within the library premises to assess the adequacy and effectiveness of existing disaster control mechanisms.
4. Reviewing relevant documents such as disaster management policies and procedures.

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#### **Procedure for Data Analysis**

**Qualitative Analysis:** Thematic analysis will be employed to analyze qualitative data obtained from interviews, open-ended survey responses, and observations. This analysis will involve identifying patterns, themes, and recurring issues related to disaster control measures in the academic library.

**Quantitative Analysis:** Descriptive statistics will be used to analyze quantitative data from closed-ended survey questions. This analysis will provide summary statistics to describe participants' responses and perceptions regarding disaster preparedness and response measures.

Overall, the combination of qualitative and quantitative data analysis methods will allow for a comprehensive evaluation of disaster control measures in the College of Education library, thereby informing recommendations for improvement.

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#### **Findings of the Study**

##### **1. Types of Disasters Occurring in the Academic Library of College of Education, Gidan Waya, Kaduna**

The study identified various disasters affecting the academic library, including theft, mutilation, fire, insect attacks, rodent invasion, water damage, deterioration of audio-visual materials, earthquakes, wind storms, thunderstorms, and sandstorms.

##### **2. Causes of Disasters in the Academic Library of College of Education, Gidan Waya, Kaduna**

The causes of disasters in the library encompass theft, mutilation, fire outbreaks, insect infestation, rodent intrusion, water damage, deterioration of materials, earthquakes, windstorms, thunderstorms, and sandstorms.

3. **Consequences of Disasters on Library Collection and Services:** The consequences observed on the library collection and services include complete closure of the library, damage to library buildings, reduction in the volume of books and journals, mutilation of materials, unsatisfactory library services, and frustrations experienced by users.
4. **Disaster Control Measures Implemented in the Library of College of Education, Gidan Waya, Kaduna**

The disaster control measures currently in place include no reported invasions, no proactive measures taken, manual extermination of insects, and the use of insecticides.

5. **Strategies to Prevent Disasters in the Academic Library of College of Education, Gidan Waya, Kaduna**

Various strategies have been suggested for disaster prevention, including the use of air conditioning systems, generators for electricity backup, strategic storage away from doorways, vents, and windows, prohibition of naked flames, maintenance of electrical wiring, positioning photocopiers outside the library walls, regular building inspections, installation of water sensing alarms, periodic roof inspections and repairs, proper positioning of water pipes, monitoring of book checkout procedures, and searching users for hidden library materials at exits.

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## Recommendations

Based on the findings, the following recommendations are proposed:

- **Increased Security:** Enhance security measures within the library premises to mitigate theft and vandalism.
- **Staff Awareness:** Provide additional training and awareness programs for library staff to ensure vigilance and proactive response to potential disasters.
- **Insect Control Measures:** Allocate resources for the purchase of more insecticides and implement regular fumigation to control insect infestation.
- **Preventive Measures Implementation:** Install air conditioning systems and implement thorough user checks at library exits as proactive measures to prevent disasters in the academic library.

These recommendations aim to improve disaster preparedness and mitigate risks to the academic library's collections and services at the Federal College of Education, Kano.

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