The Consequences of Disasters on Information Resources: *The Ahmadu Bello University Experience*

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Abstract

The paper draws lessons of extreme disasters and how it affects preservation and conservation of information resources. Data obtained were from survey of thirty respondents from the scenes of two unfortunate incidents of fire disasters that affected The President Kennedy Library, Congo Campus and Administrative block of Institute for Agricultural Research, Samaru. The data gathered were analysed using descriptive statistics. The result showed prompy and immediate community response to curb the two menaces, ***but*** *lack of required and specialized equipment hampered rescue of most of the information resources amounting to significant losses and having significant negative effects on dissemination of information. The paper suggested effective management policies on safety measures, training and education, provision of safety equipment which should be positioned in strategic locations in cases of emergency. All electrical appliance and disaster prone materials be constantly checked to ensure functionality, safely and kept secured.*

Introduction

The Ahmadu Bello University, Zaria in recent times witnessed two natural extreme disasters in the President Kennedy Library, Congo Campus and the Administrative Block of the Institute for Agricultural Research, Samaru. The two arms of the university are information repositories that contribute immensely to the intellectual and administrative development of the university and the nation. The President Kennedy Library, Congo Campus was a gift from the United States Government to support the university's student quests for knowledge through the building of a befitting library. The library supports undergraduate and postgraduate programmes with literary information in all facets of administration, law and accounting.

The Administrative block of Institute for Agricultural Research, an affiliate of the university is one of the oldest agricultural station/research institutes saddled with the responsibility of agricultural research and development since colonial era. Today it is responsible for agricultural development of north-Western States through its Monthly Training and Research Meetings (MTRMs) of Nigeria. The administrative block stores all the human knowledge and records that facilitated the administration of the research institute. The institute's establishment dates back to 1922.

It is evident therefore that the library and administrative block are information centres containing irreplaceable

accumulation of human knowledge and experiences. The written and documentary heritages which are stored provide the raw material that allows understanding, explaining and ordering both intellectual and administration of these areas..

Statement of the Problem

Every library and information centre core objective is to provide information for the needs of its patrons, and to preserve and conserve what is acquired for posterity. The study on natural disaster intends to proffer useful solutions towards curbing and preventing disasters in Ahmadu Bello University, Zaria and raising public awareness to combating these disasters, thereby contributing to the development of the community However, inadequate planning on the part of these institutions to curb and/or completely control disasters had cost magnitude of loss affecting dissemination of information. On the basis of these unexpected ugly events, there is no compromising the need to curb the ugly trend and destructive consequences. It is against this background that the statement of the problem is constructed.

Research Questions

The research question for this study was raised in line with the mission statement on preservation and conservation, and how it is invariably threatened by disasters which hinders access to information. The research questions were:

(i) What are the remote and immediate causes of natural extreme disasters are as observed in the two locations?

(ii) What factors exposed these centres to the disasters?

(iii) What are the measures necessary to curb and/or control any future occurrence?

Objectives of the Study

The broad objective is to assess the incidents and outcomes of natural extreme disasters on the two centres affected. The specific objectives are to:

(a) Identify the characteristics of the incidents in the two study areas and how the experiences gained can constitute control measure of a working policy on disaster management in the university; and

(b) Determine loss rate of materials from the two centres.

Scope

The study was conducted in Congo campus and Institute for Agricultural Research, Samaru. Congo campus of Ahmadu Bello University is where the Faculties of Administration, Law and Accounting are situated. The President Kennedy Library is the second largest library of the University. Most material resources here have administrative and historical relevance that dates back to colonial era. The school of law as it is popularly called has trained considerable number of lawyers.

The administrative block of the Institute for Agricultural Research, Ahmadu Bello University concerns itself with the administration of all staff, extension and research of the institute. Records of all types which include staff records, minutes of governing council of professional and academic boards, correspondence and human knowledge that facilitated agricultural development are obtainable from the administrative block.

Literature Review

Although numerous works have been done on conservation, preservation, theft, mutilation, of information materials and disaster management in libraries and information centres, management and mangers of the centres have not deemed it appropriate to include a working policy that would ensure routine training and sensitization on safety measures and swift measures for recovery after natural disaster (Ogden, 1999).

McIntyre, (1986) provided the scope and definition of library and archival disaster as an event which timing is unexpected and the consequences seriously disruptive. Alegbeleye (1990) reported the compounding of resource materials by the use of water to extinguish fire. This affects adversely, the recoveries of these resources and renders them unusable or necessitates expensive repairs to bring them into usable conditions.

Alegbeleye (1993) posited that the consequences of risks management in disaster control planning for libraries, archives and electronic data processing centers in African universities showed that many libraries and registries in Nigeria do not have disaster control plans and therefore call for conscious effort on disaster control and management. Borgman,(1997) supported globalization of information resources and proposed wider access as measure of risks management. He believed that when accessibility is no longer restricted to a local domicile, it becomes easily retrieved from other avenues when ever disaster struck in a particular environment. In his own opinion, automation and uploading remains a viable solution.

Lasisi, (1999) reported numerous menace affecting librarianship in the discharge of their responsibilities as information professionals. He suggested that librarians must be responsible for the handling and care of library materials Clarke (2001) proposed framework or strategy that must be formidable;

(a) Infrastructure (components that provides protection to technical and organizational processes);
(b) Threat management (be able to analyze, detect, investigate and the adaptation of occurrence that can cause harm and affect information system);
(c) Vulnerability management (prevention, insurance and recovery plan;
(d) Application that are specific in safeguarding the context of information system..

Digital Opportunity Task Force (DOT Force) (2002) recommended that attention in bridging the digital divide is achievable through initiatives, networks and collaborations. The conclusion pointed to the need in bringing awareness that could facilitate risks aversion, quick recovery when the unexpected occurs and prevention of monumental lost of information resources.

Alegbeleye (2002) gives reasons why development lies on previous historical facts that are enjoyed because of the art and science of preservation and conservation, he proposed the sustenance by a rational consciousness, through a guiding procedure based on trends that the overall benefits would contribute to research and scholarship.

Ardern (2006) was of the opinion that there should be changes in the ways and manner of which records and information are handled; he proposed

trainings, workshops and seminars. Finally, he proffered the embracing of information and communication technologies (ICTs).

It is evident that management and managers of the centres have not deemed it appropriate to include a working policy and implementation of safety which would ensure routine training and sensitization on safety measures (Trywell, 2008).

Methodology and Data Collection

Data Collection and Sample size

Oral interview and observations were the two methods used for data collection. Fifteen persons each present and witnessed the incidents were purposively undertaken as source of data in each location. Therefore, a total of 30 respondents formed the sample size.

Data Analysis

Data collected were analysed using a ıple descriptive analysis presented as rcentage and frequency. Questions were structured to get suggestions on the spot from witnesses based on their experiences of the incidences. They also provide assessments of the negative impact of the disaster particularly on dissemination of information and on the preservation and conservation of information resources.

Findings and Discussion

Oral responses obtained from the population of the study revealed that respondents were aware of extreme natural disaster which include fire, flood and insects attack..

Table 1: Responses of the causes of extreme natural disasters

Causes of natural extreme disasters	Frequency	Percentage
Fire	22	73.3
Flood	8	26.7
Insects	-	-
Total	30	100

Table 1 revealed that fire, which scored 73 % of the respondents, caused the loss of data and information resources in the two study areas. Flood had 26.7% responses. This was because water was used as the only alternative to put off the fire which eventually flooded the resource materials rendering some completely unusable. The study also revealed that bad handling, storage medium, environmental factors and housekeeping during and after the rescue exercise contributed to a great loss. The fire incident was attributable to lack of care and/or observation of safety conditions which was not accorded the priority it deserved resulting to the problems.

Table 2: Response of Factors that exposed the two locations to disaster in The Two Locations.

Factors	Responses*	Percentage
Safety knowledge	12	40
Equipments	29	97
Training and education	18	60
Exit points	15	50
Safety instructions	28	93

*Multiple responses

The response in Table 2 revealed that the factor that exposed the two locations to extreme disasters were lack of adequate safety equipment (97%). These equipments include functional fire extinguishers, sand buckets, fire alarm bells and electrical circuit breakers among others. Lack of safety instruction with 28 (93%) respondents believed that with the appropriate safety instructions it will remind and help to regulate or reduced the risks. The instructional guide to be provided should be by experts Failure to abide by these guide is an invitation to disaster. Closely following safety instructional guide was failure to train and educate personnel on how to use and maintain safety equipments. Sixty percent of the respondents said that with the appropriate training and education the equipment will be constantly evaluated for obsoleteness and functionality. During the two incidents, equipment brought to curb the menace were not operational; some were expired or lack a component to make it function.

The interview revealed that when the disasters struck, confusion sets in and the drive to immediately curb the menace was lacking. Different suggestions were proffered, majority accepted waiting for the fire extinguishing service units, it is presumed that supposing the menace was immediately curbed by those at the scene the lost might not have been very significant.50% agreed that lack of exit points prevented access into the building for swift rescue operations. It is evident that adequate emergency exit points would have provided access in numerous directions which could salvage information resources that were lost,

Loss Rate of Information Resources

Trywell (2008) reported on loss rate, and said that the value of an information asset is normally taken as the total loss to an organization if such an asset is suddenly not available or destroyed. This study tries to identify and value these information assets. The study narrows the assets to office consumable materials which include office files, computers, printers, stationeries and shelves. The result of the finding is presented in

Table 4: The value of items lost n the disasters

Items	Response*	Percentage
Books	30	100
Files	20	67
Computers	28	93
Printers	15	50
Stationeries	30	100
Shelves	22	73

The result on table 4 revealed that books and stationeries in the two sites are the most valuable in the disaster This is closely followed by computers which scored 93 % The value rating for furniture was just 50%

This finding agrees with Clarke (2001) who said cost-effectiveness could be determined in terms of costs on acquisition, training, policy and planning. Therefore, the cost on loss rate could be computed on the following;

a) The time it will take management to plan and control disasters,
b) The extent it will take to make surrogate and/or backup copies
c) The loss of services to client and administration responsibilities during this time, and
d) Cost of purchasing media for storing resources.

From the findings of the study, loss rate cannot be calculated in any circumstance of disaster, it is very important that libraries/information centres weigh up threats, the disasters and the harm that may befall an organization when not safeguarded. This helps in the balancing of sound predictions and the uncertain benefits culminating to appropriate measures.

Table 5: Measures necessary to curb disasters

Measures	Respondent*	Percentage
Implementing a working document/safety manual	20	67
Digitalization	15	50
Building fire proof storage facilities	10	33
Well equipped safety equipment	29	97
Periodic check to ascertain functionality of equipment by experts	30	100
Training and education on safety measures and risks dictation	26	87

*multiple answers

Table 5 shows the analysis of suggestions from respondents on how to curb disasters in the university as a whole.

Responses from respondents revealed that 67% are in agreement that there should be a working document on safety and should be implemented. On digitalization, 50% agreed and

subscribed to it. Building fire proof storage facilities scored only 33% agreed. The response on well equipped safety gargets was 97%. In the same manner, all the respondents supported periodic check of the equipments to ascertain functionality and should be done by experts. Training and education on safety measure and risks dictation had 87%.

The implication of the above results was that management must proactively respond to risks, avoid disaster-prone technologies, and facilitate disaster prevention and control through sensitization and education of personnel on safety measures. So that management can dictate, recover and insure her resources. Finally, the respondents firmly assert that management must never compromise her efforts on safety measures.

Conclusion

Disaster does seriously affect and destroy human records that may forever remain lost. The experiences of the President Kennedy Library, Congo and The Administrative Block of Institute for Agricultural Research, Samaru, have become very important lesson and calls for precautions and measures to prevent the occurrence of an avoidable disaster. Even though disasters are not planned, but when it does occur, there is need to respond efficiently and rapidly in order to limit its impact.

Recommendations

Based on the result of the study the following recommendations are proposed:

(i) Information resource centres are advised to make surrogate copies of very vital information sources for posterity sake.

(ii) The library especially is advised to subscribe to a consortium that is parallel in operations and services so that they access and retrieve information destroyed or vandalized from the cause of fire and during processes of rescue. For data banks like the case of the administration block, the registrar's office of the university and its archives should be expanded to accommodate files from other affiliates of the university as measures to safeguard the resource materials.

(iii) The formation of disaster recovery committee remains very inevitable, their point of reference should enable them to respond efficiently and rapidly to disasters and be able to limit the impact.

(iv) There should be periodical training of staff on safety measures and usage of these safety facilities.

(v) Staff should be encouraged to be very vigilant and proactive in ensuring that they observe, adhere and are educated on the need to preserve all resource materials.

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