academicresearchJournals

Full Length Research

Assessing the level of Education and Training of Library Staff for Disaster Risk Reduction by University Libraries in North-Eastern Nigeria

Dr. Henry M. Abareh

Deputy University Librarian, Abubakar Tafawa Balewa University, PMB 0248, Bauchi, Bauchi State, NIGERIA.
E-mail: hmabareh07@yahoo.com

The study assessed the level of education and training for Disaster Risk Reduction (DRR) preparedness of six university libraries in North-Eastern Nigeria. The objectives of the research determined the level of education processes; ascertained the relevance of research on DRR; and determined the level of library staff training on DRR. The study adopted the survey design. The population comprised of 88 Librarians and 75 Para-Professionals staff totaling 163 subjects. The questionnaire was the instrument used for data collection. The collected data was analyzed using descriptive statistics, while results were presented in tables using frequency distribution and mean percentages. Findings of the study revealed that, majority of the respondents lacked the basic education and training on DRR at the level of workshop and conference attendance, seminar, courses, postgraduate studies etc. Librarians have not been conducting researches on DRR specifically; and staff lacked training on how to handle fire extinguishers in the event of a disaster. Recommendations were made on how to reverse the identified deficiencies.

KEY WORDS: education and training; disaster risk reduction; library staff; university libraries; north-eastern Nigeria

Cite This Article As: Abareh HM (2017). Assessing the level of Education and Training of Library Staff for Disaster Risk Reduction by University Libraries in North-Eastern Nigeria. Inter. J. Acad. Lib. Info. Sci. 5(6): 180-189

INTRODUCTION

Disaster is a common phenomenon that can and may happen when least expected. It very often comes unannounced and uninvited with disastrous consequences. All libraries are susceptible to various forms of disasters which are mostly caused by either man-induced or natural hazards. Disasters can be caused by nature: these include floods, earthquakes, volcanic eruptions, biological agents, fires, rain and windstorms, tidal waves, tornadoes, thunder storms, hurricanes and landslides etc. Disasters can be caused by man: these include chemical spillages, civil/political disturbances, construction failures, electricity outages, human error and carelessness, vandalism, toxic fumes, arson, bombings, riots, stampede, thefts to mention but a few. University Libraries are often bedeviled by threats such as leaking roofs, arson, termite and rodent activities, flooding as result of heavy rain, poor storage and environmental conditions, inadequate security leading to break-ins and theft, or a window left open during a night of pouring rain. Disasters occur rapidly, instantaneously

and indiscriminately. Almost every day the media (print-newspapers, electronic- radio and television channels) carry reports on disaster striking several parts of the world. University libraries will always face natural or man-made hazards. When university libraries are prepared, the negative impacts of natural hazards that can lead to disasters can be averted or reduced through educating staff on the dynamics of disaster handling procedures.

STATEMENT OF THE PROBLEM

Over the years, libraries in Nigeria had experienced some kind of disasters. For instance, six States' public libraries in North-Eastern Nigeria experienced the following disasters: Adamawa-vandalism; Bauchi- leaking roofs; Borno-floods; Gombe-leaking roofs; Taraba-floods; and Yobe-burst pipes. In 2010, Federal Polytechnic Bauchi Librarian's Office was burnt. In 2004, Federal Polytechnic Idah library was set ablaze as a result of students' unrest. The Benue State Polytechnic Library was razed as a result of electricity outage; in March 2013, University of Jos old library was destroyed by fire and in October, 2016 its permanent site library was razed again. Disasters can have serious financial implications and also cause disruption of services. In fact there is no library that is free from risks and disasters- whether natural or man-made can happen any time in any part of the world. In spite of the above scenarios, unfortunately, university libraries in North-Eastern Nigeria seem not to have inculcated education for DRR in their university libraries; hence they run their libraries as though they will never experience a disaster. This lack of education often results into university libraries resorting to various forms of "fire-brigade" or "self-help" approaches in the event of a disaster, which usually result in haphazard prevention or poor handling of disasters. The above disaster incidences propelled the investigation of this study in order to assess the level of education and training for DRR preparedness by University Libraries in North-Eastern Nigeria.

OBJECTIVES OF THE STUDY

The objectives of the study were to:

i.   determine education processes of library staff on DRR in university libraries in North-Eastern Nigeria;
ii.   ascertain the relevance of skills acquisition on DRR in university libraries in North-Eastern Nigeria; and
iii. determine the level of attainment of formal training received by library staff on DRR in university libraries in North-Eastern Nigeria.

LITERATURE REVIEW

Education and Training are fundamental to the improvement of Disaster Risk Reduction operations. Training at all levels can aid the acquisition of knowledge and skills on DRR, as lack of essential knowledge and skills can be inimical to DRR measures. Disaster education is recognized as an essential element in sustainable development since it accelerates the progress of societies toward disaster resilience (UNESCO, 2004).This view was reiterated in the (Hyogo Framework for Action Report, 2005), whereby, it is stated that, education for creating a culture of disaster resilience is an interactive process of mutual learning among people and institutions. It encompasses far more than formal education at schools and universities, and affects all aspects of life through the concerted effort to overcome universal barriers of ignorance, apathy, disciplinary boundaries and lack of political will present in communities. Education also involves the enhancement and use of indigenous knowledge for protecting people, habitat, livelihoods, and cultural heritage from natural hazards. The report further postulates that history teaches that inadequate disaster reduction awareness and preparation repeatedly lead to prevent loss of life and damage in all major natural disasters and that preparation through education is less costly than learning through tragedy. Educational strategies for reducing risks should be seen as a social responsibility (La Longa; Camassi; & Crescimbene, 2012). Being properly prepared is one of the keys to surviving an emergency or a disaster, and so Christensen (2011) suggest that, in order to be prepared, people need appropriate education in preparedness, which includes elements of prevention, and planning.

While the importance of education in promoting DRR has already been identified by researchers and policy makers (Amari, Bird, Ronan, Hynes & Towers, 2016); education on the other hand as has been recognized as having a cross-cutting role in disaster reduction by extending the people's engagement to the direction and maintenance of sustainable communities internationally (Sakurai & Sato, 2016). Education enhances the acquisition of knowledge, values and priorities as well as the capacity to plan for the future and improve disaster risk reduction impact. It is, for example, well documented that educated individuals have better basic practical knowledge on nutrition and health practices (Nayga 2000, Burchi 2010). Similarly, education may also enhance knowledge on disaster risks and how to respond to such risks. Education can influence risk perception. If people perceive their risks to natural disasters to be real, they are more likely to react to cope with these risks. It is found that highly educated individuals are better aware of the earthquake risk (Ainuddin et al. 2013) and are more likely to undertake disaster preparedness (Paul and

Bhuiyan, 2010). High risk awareness associated with education thus could contribute to vulnerability reduction behaviors. While Yilmaz (2014) examined formal disaster education to be implemented in elementary schools through extra-curricular activities to raise awareness and build the capacity of students and teachers to prevent and respond to disasters appropriately; UNESCO and UNESCO Associated Schools (2014) designed a curriculum on DRR education for teachers. Wand, Ayuba and Asika (2015) also advocated the inculcation of formal and informal education, and policy development for DRR education in Nigeria.

Seneviratne, Baldry, and Pathirage (2010) argued that disaster knowledge is important in managing disasters successfully. Accordingly, they identified eight factors which were classified as technological, social, legal, environmental, economic, functional, institutional and political as embodiment of disaster knowledge. Pathirage, Amaratunga, Haigh, and Baldry (2007) emphasized the importance of knowledge and good practice sharing in disaster mitigation strategies with particular reference to post-Tsunami reconstruction in the Sri Lankan context. They also introduced a knowledge base infrastructure aimed at increasing the effectiveness of disaster management by facilitating the sharing of appropriate knowledge and good practices. In justifying the value of education to effective disaster response, Muttarak and Lutz (2014) attests to the fact that, when facing natural hazards or climatic risks, educated individuals, households and societies are assumed to be more empowered, and adaptive in their responses to, preparation for, and recovery from disasters.

Public awareness and education as elements of disaster risk reduction was first highlighted in the Yokohama Strategy and Plan of Action in 1994 and since then the United Nations international Strategy for Disaster Risk Reduction set it as one of its four (4) key objectives in the Hyogo Framework for Action for 2005-2015 (UNISDR, 2005). Public awareness in conjunction with education, aims to familiarize vulnerable societies with their risks and inform them of the various actions that could be taken to minimize these risks (UNISDR, 2002). Ha and Jamil (2015) admitted that, one of the measures to enhance public awareness of disaster risk management is to provide educational programmes to the public. The use of schools as a conduit for public awareness and education efforts is widely accepted as an effective means to create public awareness as the messages are relayed to not only the learners, but also the educators themselves and through the learner's enthusiasm, their guardians and the rest of their Matthew and Eden (1996); and Buchannan (1988), contended that knowledge and training of staff are the best protective measures available, to handle emergencies and competently by reducing the risk considerably as essential requirements of any DRR programme.

According to National Capacity Assessment Report, NCAR (2012) in Nigeria, DRR mainstreaming into the primary and secondary school curricula is handled by the Education Development Council established by NEMA. DRR awareness and risk reduction activities are being included in the lesson plans, though much remains to be done to integrate these curricula at the local level and to train teachers. NEMA has been providing substantive support to the university system in Nigeria since 2009. Six universities from each of the six geo-political zones of the country have been identified and supported by NEMA to develop and train Master degree programs on Disaster Risk Reduction. These universities are: University of Maiduguri, North-East; Ahmadu Bello University Zaria, North-West; University of Nigeria Nsukka, South-East; Federal University of Technology Minna, North- Central; University of Port-Harcourt, South -South; and University of Ibadan, South-West.

The goal of developing 'disaster-resilient communities', is widely understood to rest heavily upon the success of disaster risk reduction education (Nakano,2016). The link between formal schooling and disaster education interventions has been recognized as disaster related education has been prioritized by international agencies as key approach to building disaster-resilient societies (Selby & Kagawa, 2012).The integration of both formal and informal education through schools is the one way to ensure that these messages reach into every home and community and that learning is sustained into future generations. The 2006-2007 UNISDR campaign "Disaster risk reduction begins at school" aimed to promote the integration of disaster risk reduction into government plans for school curricula and to ensure that school buildings are safe from the impacts of natural hazards (UNISDR, 2006). While Tanaka (2005) argued that, apart from formal schooling, there is evidence that disaster education interventions can be influential to raising awareness and knowledge of disaster, which in turn can enhance disaster preparedness, Mutarak and Pothisiri (2013) in concordance, hypothesized that formal education can promote disaster preparedness because education enhances individual cognitive and thinking skills.

Thus, Ronan and Towers (2014) elucidate the means by which hazards and disaster preparedness education programs for children can shift to systems-based models which incorporate not only systemic epistemologies, but also more systems-based, and interconnected, curricula. This includes curricula that help children connect the physical world and science with the social world and human factors. It also includes the more systemic idea that natural hazards are but one example of a larger category of problems in life related to risk and uncertainty. Thus, the main aim of a systems educational approach is to help children equip themselves with knowledge, skills, motivation and confidence that they
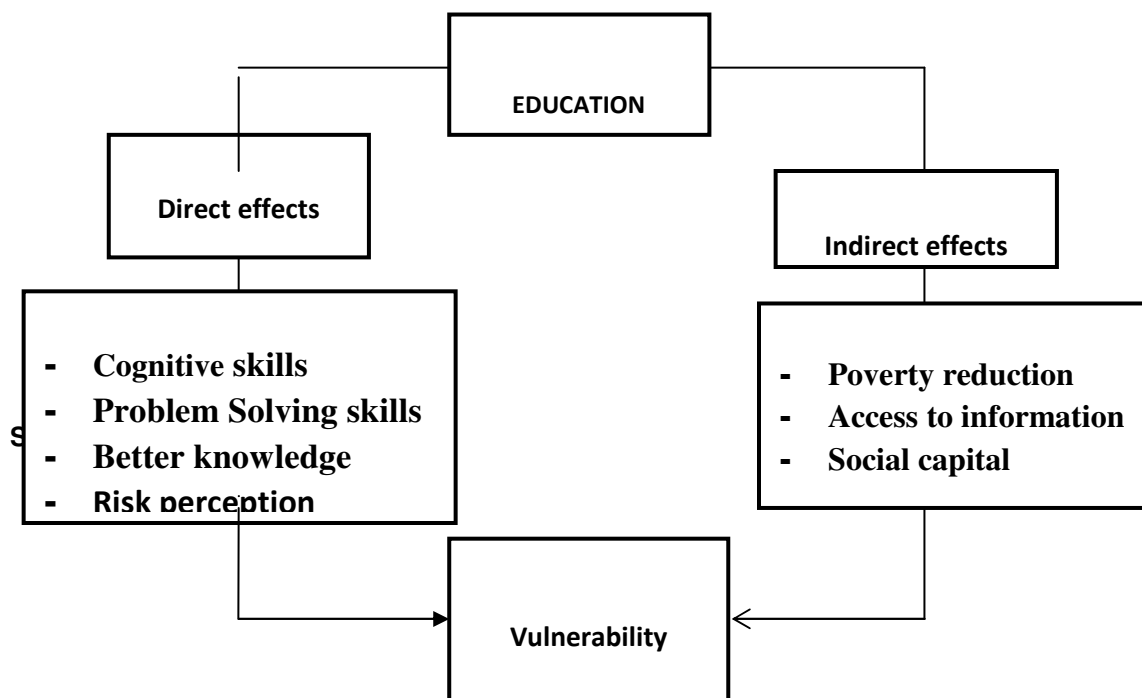
Source: (Muttarak& Lutz, 2014)
Figure 1: Flowchart Displaying the Processes through which Education contributes to Vulnerability Reduction

can increasingly manage a range of risks in life.

While poverty is well-considered as a major cause of vulnerability and poverty reduction has recently been recognized as one key tool to enhance adaptive capacity, education both in its own right and as a means for poverty alleviation, has not yet been put on the forefront for climate change adaptation efforts. There are many sound reasons to assume that education can contribute to vulnerability reduction and enhance adaptive capacity. The relationships between education and vulnerability reduction can be both direct and indirect as presented in Figure 1.

Education can play an important role in reducing the negative impacts of extreme climate events in direct and indirect ways. Directly formal education is considered as a primary way individuals acquire knowledge, skills, and competencies that can influence their adaptive capacity. There is a large body of literature on the effects of education on health which is summarized by Lutz and Skirbekk (2013) who concluded that there is enough evidence to assume direct functional causality. First, there is evidence that the learning experiences associated with formal education have a lasting impact on the synoptic brain structure and enhances cognitive skills (Neisser et al., 1996).

Following the adoption of the Hyogo Framework for Action, various disaster educational materials that are described as "tools," taken in various forms such as printed materials (booklets, leaflets, textbooks, handbooks/guidebooks, and posters) and non-printed materials (activities, games, and practices) were developed (UN/ISDR, 2006). According to Mulyasari, Takeuchi and Shaw (2011) these tools have an important function in communicating the disaster education to the public via formal, non-formal, and informal education, which may take place at school, at home, and/or within the community. In addition, media may also serve as a communication tool. The Hyogo Framework for Action places importance on capacity development. Training and learning are key components of capacity development. But we do not yet have sufficient programmes and agreements between the many actors involved in generating knowledge and practicing disaster risk reduction to enable the smooth transfer of knowledge between researchers, trainers and practitioners. There is in effect learning-action gap, which reduces both academic work and practice. This gap is a product the institutions that shape incentives for researchers and

practitioners (The Pro Vention, 2007).

Among Non-Governmental Organizations (NGO5) mention should be made of Action Aid, which has active education and disaster departments. They lead the Disaster Risk Reduction through the Schools project, which approaches education as part of community life. This is underway in Ghana, Kenya, Malawi, Haiti, Bangladesh, India, and Nepal to promote teaching on hazards and risk reduction in schools (Action Aid . . . 2010). Save the Children also works in education and disaster management with a special focus on material (shelter, food), developmental (schooling, play), and emotional (protection, psychological healing) needs of children (Save the Children, 2010). In Angola and Burundi, workshops have been held to promote the integration of disaster risk reduction into education. In Madagascar, teaching materials and manuals on disaster-risk reduction have been developed. Mozambique has started pilot projects in primary schools to train teachers and children how to live with disasters. In Burkina Faso, environmental education has been adopted at the primary school level and disaster-risk reduction is partly integrated into higher education (Global Assessment Report . . . 2009).

Muir and Shenton (2002) describe one of the chief reasons for failure of a disaster plan as lack of staff awareness. Training is necessary to ensure that your staff knows what will be expected of them in the event that your disaster plan is used. One approach is to train a single ERT (Emergency Response Team) which will expected to lead the other employees during disaster. Another approach is to give all employees general training on the plan and give your ERT team more detailed training which is specific to their individual tasks. The disaster planner must decide which staff will receive what degree of training (Ogden, 1999; Hasenay & Kritalic, 2010; Okello-Obura & Ssketto, 2011). Abareh (2016) findings suggests that library staff should have sufficient training to manage disaster effectively; while Eden and Matthews (1997) posited that at the very least all staff should be aware of their responsibilities and roles during an emergency and of the locations of assembly points, evacuation routes and any emergency equipment available. Rathan (2013), however, espoused the possible roles that the library professionals, may assume in case of disasters besides their regular or routine jobs.

METHODOLOGY

The descriptive survey design was used in conducting the study. The population comprised of 217 library staff (Librarians and Para-Professionals) drawn from six university libraries in North-Eastern Nigeria. A self-designed questionnaire was used as the instrument for data collection from the university libraries surveyed. The

structured questionnaire consisting two parts was used to obtain relevant information pertinent to variables investigated. The administration and retrieval of the questionnaire took place from January to July, 2016. The SPSS Software version 16.0 was used in analyzing the collected data. Data was analyzed using simple percentages, frequency distribution and the mean.

The target (Table 1) population was two hundred and seventeen (217) comprising of (93) Librarians and (124) Para-Professional staff of university libraries in the North-Eastern Nigeria. The entire population of 217 (100%), was used for the study, because it was manageable in terms of accessibility to the subjects. The choice of these categories of library staff was justified on the basis that, the issue of disaster risk reduction preparedness is within the managerial /professional domain.

RESULTS AND DISCUSSION

There were 163 responses from the six Federal and States' university libraries made up of 88 Librarians and 75 Para-Professional library staff who participated in the study. 217 copies of the questionnaire were administered by the researcher, out of which 163 (75.1%) were filled and returned in useable formand found valid for analysis; while 54 (24.8%) copies were either not returned or invalid (see Table 2).

Desirability to train Emergency Response Team

From Table 3, respondents were asked on the desirability to train a single Emergency Response Team (ERT) who will lead other employees during disaster; 58(15.80%) strongly agree; 73(15.90%) agree totaling 131(31.7%). 18(16.07%) were undecided; 11(8.27%) disagree and 3(4.29%) strongly disagree respectively, totaling 13(11.56%) who disagreed and strongly agreed respectively with this statement. On whether professional library staff should be encouraged to conduct researches on various aspects of disasters generally and on DRR specifically, 67 (18.26%) and 73 (15.90%) with a total score of 140 (34.16%) respondents strongly agreed and agreed respectively with the statement, while, 15(13.39%) undecided; 4(3.01%) and 4(5.71%) totaling 8(8.72%) disagreed and strongly respectively agreed with the statement.

Level of Staff Training and Skills Acquisition

On the level of staff training and skills acquisition on DRR, 14(3.81%) and 22(4.74%) with a total score of 36(8.55%) respondents strongly disagreed and disagreed respectively with the statement that, DRR training cannot

Table 1: Profile of University Libraries Surveyed

S/N	Name of Library	Type	Year	Librarians	Para Professionals	Total
I.	Abubakar Tafawa Balewa University Library, Bauchi	Federal	1981	24	20	44
2.	Ramat Library, University of Maiduguri	Federal	1975	34	52	86
3.	Ibrahim Babangida Library, Modibbo Adama University of Technology, Yola	Federal	1981	9	6	15
4.	Gombe State University Library, Gombe	State	2005	10	14	24
5.	Taraba State University Library, Jalingo	State	2008	3	7	10
6.	GoodLuck Jonathan Library, YobeState University, Damaturu	State	2007	13	25	38
	Total			**93**	**124**	**217**

Table 2: Response Rate

University Libraries	Population	Questionnaire administered	Questionnaire returned		Questionnaire not returned/ invalid	
ATBUB	44	44	39	(88.6%)	5	(11.3%)
IBBY	15	15	12	(80%)	3	(20.0%)
Ramat	86	86	60	(60.7%)	26	(30.2%)
TRSU	10	10	10	(100%)	-	-
GSUG	24	24	22	(91.6%)	2	(8.3%)
Dr.G.E.J.D	38	38	20	(52.6%)	18	(47.3%)
Total	**217**	**217**	**163 (75.1%)**		**54 (24.8%)**	

Key
ATBUB- Abubakar Tafawa Balewa University, Bauchi
IBBY- Ibrahim Babamosi Babangida, Muhammed Adama University of Technology, Yola
Ramat- Ramat Library, University of Maiduguri
TRSUJ-Taraba State University, Jalingo
GSUG- Gombe State University, Gombe
Dr.G.E.J.D- Dr. Goodluck Ebele Jonathan Yobe State University, Damaturu.

enhance the acquisition of knowledge for implementing DRR operations in the library. While 24(21.43%) were undecided; 57(42.85%) and 46(65.91%) with a total score of 103(108.76%) agreed and strongly agreed with this statement. On the statement that lack of essential knowledge and skills can be inimical to effective DRR response in the event of a disaster. 47(12.81%) and 90(19.61%) responses, with a total score of 137 (15.8%) strongly agreed, and agreed respectively. At the same time, 17(15.18) were undecided; 6(4.5%) and 3 (4.29%)

totaling 9 (8.79%) disagreed and strongly disagreed respectively with this statement.

Level of Formal Staff Training on DRR

Another objective of the study was to determine the level of training staff attained with regard to formal training on DRR. On attending formal or informal training on DRR; 69(18.80%) and 60(13.07%) respondents with a total

Table 3: The level of Education and Training on Disaster Risk Reduction Preparedness

S/N	Statements	N	SA		A		Total Agreement		U		D		SD		Total Disagreement	
			High						Low							
			Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1.	It will be desirable to train single Emergency Response Team or Committee.	N	58	15.80	73	15.90	131	11.48	18	16.07	11	8.27	3	4.29	32	10.11
2.	Staff should conduct researches on DRR		67	18.26	73	15.90	140	12.27	15	13.39	4	3.01	4	5.71	33	10.48
3.	DRR training can enhance the acquisition of knowledge on DRR.		14	3.81	22	4.79	36	3.16	24	21.43	57	42.85	46	65.71	127	40.32
4.	Lack of essential knowledge can be inimical to effective DRR response.		47	12.81	90	19.61	137	11.48	17	15.18	6	4.51	3	4.29	26	8.25
5.	There is need for formal and informal training on DRR programmes.		69	18.80	60	13.07	129	11.31	12	10.17	17	12.78	5	7.14	34	10.79
6.	Participation in physical emergency drills and use of Fire-fighting sessions is needful.	163	60	16.35	75	16.34	135	11.83	9	8.04	16	12.03	3	4.29	28	8.89
7.	Training on how to use fire extinguisher is relevant.		52	14.17	66	14.38	118	10.34	17	15.18	22	16.54	6	8.57	35	11.11
	Gross Total	163	367	100	459	100	826	100	112	100	133	100	70	100	315	1141
	Mean		52.42	32.16	65.57	40.22	118	72.38	16	9.8	19	11.66	10	6.13	45	27.61

score of 129(31.87%) strongly agreed and agreed respectively with the statement that, they have never attended any formal or informal training programmes such as postgraduate studies, seminars, short-courses, workshops or conferences on DRR. Nevertheless, 12(10.7%) were undecided; 17(12.79%) and 5(7.14%) totaling 22(19.93%) disagreed and strongly disagreed respectively with the statement. On lack of participation in these training exercises: rescue operations; use of First Aid Kits; physical emergency drills; and firefighting mock sessions, 60 (16.35%) and 75(16.43%) respondents which totaled 135(32.78%) strongly agreed and agreed respectively with the statement. 9 (8.04%) were undecided; 16(12.03%) and 3(4.29%) with a total score of 19(16.32%) disagreed and strongly disagreed respectively. On lack of training on how to handle fire extinguisher, 52 (14.79%) and 66 (40.5%) with a total score of 118(55.29%) respondents strongly agreed and agreed respectively with statement, 17(15.18%) were undecided, while 22(16.54%) and 6 (8.57%) totaling 28(16.5%) disagreed and strongly disagreed respectively.

The result of the analyses shows that, the mean of 826(72.38%) respondents admitted that, the extent of Education, Research and Training was very low; while 315(27.61%) disagreed.

FINDINGS

The study examined the role of education in Disaster Risk Reduction in University Libraries in North-Eastern Nigeria. The following findings were identified from the analysis of the study:

1. There was lack of Emergency Response Team/Committee in the university libraries surveyed to coordinate DRR activities.
2. Librarians have not been conducting enough researches on disasters generally and on DRR specifically.
3. Library Staff have not received requisite education/training on DRR programmes at whatever level such as workshops, conferences, seminars, symposia, short-courses attendance; and postgraduate studies; never participated in training exercises such as rescue operations, emergency drills, and how to use First Aid Kits etc.
4. Lack of training on use of fire-extinguishers by staff was also observed.

CONCLUSION

Based on the findings of the study, in can be deduced that, university libraries in North-Eastern Nigeria have not yet recognized the importance of the role of education in managing their DRR activities as a result of lack of institutionalization in their core operations. It has been established that, university libraries in North-Eastern Nigeria had no formal or informal training for their staff on DRR; Lacked Emergency Response Team/Committee; Lacked essential knowledge on disaster response among others. Hence there is need to reverse this trend by educating and training library staff on the essence of education since what you know is better than what you have in when it comes to saving lives and reducing losses during disasters.

RECOMMENDATIONS

The following recommendations were advanced as derived from the findings of the study:

1. There was need for Emergency Response Team/Committee in the university libraries surveyed to coordinate DRR activities.
2. Librarians should be encouraged to conduct researches on disasters generally and on DRR specifically.
3. Library staff should be sponsored to attend conferences, workshops, courses, and seminars on DRR to enhance their knowledge on DRR.
4. Both old and newly recruited library staff should be trained on how to use fire extinguishers practically as often as possible.

REFERENCES

Abareh HM (2016). Assessment of Disaster Reduction Components in University Libraries in North-East Zone, Nigeria. PhD thesis, University of Maiduguri.

Action Aid (2010). Retrieved from: *http//www.actionaid.org.uk*

Amari A, Bird DK, Ronan K, Hynes K, Towers B. (2016). Disaster Risk Reduction education in Indonesia: Challenges and Recommendations for scaling up. Nat. Hazards Earth Systems Discussion.doi:10.5194/nhess-2015-344

Ainuddin S, Kumar RJ (2013). People's risk perception in earthquake prone Quetta city Baluchistan. *http//www.dx.doi.org/10.1016/j.ijdrr.2013.10.006*

Borchi F (2010). Child nutrition in Mozambique in 2003: the role of mother's school and nutrition knowledge. Economics and Human Biology.8: 331-359.

Christensen CB (2011). Preliminary Concepts for Developing Childhood Education in Emergency Preparedness. Master's thesis, Arizona State University, Arizona.

Eden P, Matthews G (1997). Disaster management in

libraries. Facilities,15: 35-59.

Global Assessment Report on Disaster Risk Reduction (2009). Geneva: UNISDR: Retrieved from http://www. Preventionweb/net/English/hyogo/ger

Ha H, Jamil S (2015). Disaster Risk Management and Public Education in Singapore. Land Disaster Strategies in Asia Chapter 12, pp.171-188.

Hasenay D, Krictalic M (2010). Disaster and after: What have Croatian libraries learned about preservation and disaster management after the war experience?.A paper presented at the World Library and Information Congress 76th IFLA General Conference and Assembly, Guttenberg, Sweden. 9p.

La Longa F, Camassi R, & Crescimebene M (2012). Educational Strategies to Reduce Risk: a choice of social responsibility. Annals of Geophysics.55:184-197.

Matthew G, Eden P (1996).Disaster Management in British Libraries: Project Reports with Guidelines for Library Managers. London: The British Library.

Muir A,Sheton S (2002). If the worst happens: the use and effectiveness of disaster plans in libraries and archives. Library Management.23: 115-124.

Mulyasari F, Takeuchin Y, Shaw R (2011). Chapter 7: Important tools for Disaster Education. Community, Environment and Disaster Risk Management. 23: 137-151.

Muttarak R, Pothisiri W (2013). The role of education on disaster preparedness: Case study of 2012 Indian Ocean Earthquakes on Thailand's Andaman Coast. Ecology and Society. 18: 51-58.

Muttarak R, Lutz W (2014). Is education a key to reducing vulnerability to natural disasters and hence unavoidable climate change? Retrieved from www.http: //dx.doi.org/ES-06476- 190142.

Nakano G (2016). Institutionalization of education for effective DRR in Uttaraland, India. M.Sc. Dissertation, Kyoto University.

National Capacity Assessment Report (2012). Federal Republic of Nigeria: Disaster Risk Reduction Capacity Assessment. 34p.

Nayga RM (2010). Schooling, health knowledge and obesity. Applied Economics. 32: 815-822.

Neiser U, Boodoo G, Bourchard TJ , Boykin AN, Brody NJ, Ceci SJ, Halpern DE, Loehlin JC, Perloff R, Sternberg RJ, Urbina S (1996). Intelligence: knowns and unknowns. American Psychologists. 51: 77-101.

Ogden S (1999). Protection from loss: water and fire damage. Biological agents, theft and vandalism, prevention of library and archival materials: a manual. NEDCC Technical leaflets, pp.69-75.

Okello-Obura C, Sskekitto F (2011).Records and Information Disaster Preparedness in Selected Organizations in Uganda. East and Southern Africa Regional Branch of the International Council on Archives Journal, 30: 135-161.

Pathridge C, Amaratunga D, Haigh R, Baidry D (2007). Knowledge sharing in disaster risk management strategies: Sri-Lanka post-Tsunami context. CIB World Building Congress: pp. 298 1-2993.

Paul BK, Bhuiyan RH (2010). Urban earthquake hazard: perceived seismic risk and preparedness in Dhaka city, Bangladesh. Disasters. 34: 337-359.

ProVention (2007). Making Disaster Risk Reduction Work. Tanzania: The ProVention Forum. 24p.

Rattan P (2013).Role of Library and Information Centres in Disaster Management. Library Philosophy & Practice (e-journal). Paper 886.

Ronan KR, Towers B (2014).System Education. Systems 2: 1-23.

Sakurai A, Sato T (2016). Promoting education for disaster resilience and the Sendai Framework for DRR. JDR, 11: 402-412.

Selby D, Kagawa F (2012).Disaster Risk Reduction in School Curricula: case study from thirty countries. UNESCO: Geneva, Switzerland.

Seneviratne, K, Baltry D, Pathirage C (2010). Disaster knowledge factors in managing disasters successfully. International Journal of Strategic Property Management. 4: 376-390.

Tanaka K (2005). The Impact of Disaster Education on Public Preparation and Mitigation for Earthquake: a cross-country comparison between Fukui, Japan and San Francisco Bay Area, California, USA. Applied Geography. 6:201-225.

UNESCO and UNESCO Associated Schools (2014). A Teacher's Guide to DRR: Stay safe and be prepared. Paris: UNESCO, 57p.

UN/ISDR (2006). Making the case for disaster risk reduction in Africa. 44p.

UN/ISDR (2005). Hyogo Framework of Action 2005-2015: Building the resilience Nations and Communities in Disasters. World Conference on Disaster Reduction. Kobe, Hyogo, Japan.

Wand MZ, Ayuba IG, Asika BG (2015).Needs for Disaster Risks Reduction Education in Nigeria. Journal of Environmental Science, Toxicology and Food Technology.9: 43-47.

Yilmaz, E. (2014). School-based disaster education through curricular and extra-curricular activities: a comparative study. Master's thesis, Middle East Technical University.