

Greening: Pluses and Minuses of Nigerian Libraries in Promoting Environmental Sustainability

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Abstract:

Addressing and reversing the human impact on the environment is part of a library's social responsibility. This paper examines green initiatives within the context of Nigerian libraries with emphasis on analysis of related policy and practice of green librarianship, and pluses and minuses of Nigerian libraries in the green initiatives. The result of a survey of librarians in Nigeria is presented. A four-dimensional, cross-sectional research design was adopted for the study which combined library search, interview, participant observation and a 10-item survey questionnaire using the SurveyMonkey tool for data collection. The questionnaire was administered on librarians registered in the Nigerian Library Association (NLA) Online Forum. It sought to investigate the level of awareness of librarians of greening, attitude to greening libraries, efforts at greening libraries, greening policy in the libraries and ways of further advancing greening for sustainable development. Preliminary findings from the literature search indicated that there is an exciting emergent library discourse on "green" policy and actions, however, Nigerian libraries are implementing "green" measures at minimal level and rather unconsciously. The level of awareness of greening initiatives among Nigerian librarians is still relatively low and the recommendations of this study calls for increased awareness and environmental literacy among library users and the entire community to build better green momentum in Nigerian libraries.

Keywords: Greening, Green libraries, environmental sustainability, Nigeria

Introduction

The phenomenon environmental sustainability has become a global concern because of the state of the world's ecosystem and the library is not left out in this because of the vital role it plays in any nation. The instability caused by man's conscious and unconscious actions has necessitated different individuals, governmental and non-governmental organizations across the globe accepting environmental sustainability as a social responsibility which is increasingly becoming an interest for libraries and librarians all over the world. In attempting to ensure this, a novel concept popularly called greening has evolved.

Greening encompasses all initiatives that promote an environmentally stable climate, while in libraries it refers to re-planning, re-designing and better utilization of library facilities to reduce its negative impact on the environment. Therefore, the green library focuses on utilization of natural or renewable energies like solar energy; less dependence on fossil fuel, planting trees around the library to reduce overheating and the utilization of cooling equipment, water conservation; printing less; promoting digital library and e-books; and providing e-learning platforms to foster sharing of good practices between global north students and global south students.

The importance of greening as thermal modifier for indoor and outdoor climate environment such as the tropics, a climate Nigeria as a country enjoys, cannot be over-emphasized. Trees and other vegetation shield people from direct sunlight, block radiant heat loss from homes and people, protect soil and water quality, modify local climate, reduce noise and air pollution (Girling and Kellett, 2005). Some libraries in the developed world are now focusing on designing library buildings that are environmentally green, while some others are embarking on renovations.

The main thrust of this paper is to examine the attitude of librarians towards greening and the greening initiatives taking place in Nigerian libraries. It actually sets out to present findings on the pluses and minuses of Nigerian libraries in embracing the novel concept: greening in all ramifications. It is believed that the research is a worthwhile effort in gingering the library in providing a safe ecosystem not just for living but also for learning.

The Library and environmental sustainability

Environmental degradation has become a serious source of concern for contemporary and information professionals in developing economies; as a result, there is an ardent need to contribute to environmental sustainability. Abiolu and Okere (2011) submit that information professionals have a role to play in minimizing the degradable state of the environment and its effects on human health. They identify new roles evolving for librarians as change agents, educators, electronic experts and partners to other change agents. Crumpton (2009) who enthused about librarians' role in disseminating green information corroborates this.

Reynolds *et al.* (2010) opine that greening can be attained through the practice of sustainable technologies or "greening operations" in the way of architectural designs, waste management, renewable energy generation and use of energy efficient lighting. Adlrich (2010) argues that libraries should obtain the services of a "sustainable building advisor" when planning their buildings to ensure that greening standards will be met. Walker (2009) recommends choosing appliances and electronics with eco-label as one of the vital approaches librarians can implement for "greener" buildings.

As much as construction of green buildings are desirable however, not all libraries can afford the cost, particularly those in developing nations nor can they afford to pull down and reconstruct old buildings. Not all libraries can afford to pursue extravagant renovations but rather could and should implement small environmentally responsible changes into their operations. These small initiatives are ones that encourage reducing, reusing, and recycling paper (Urbanska, 2009). Some of the greening movements also reflect in the changing attitudes and values of the society at large (Moore, 2005; Jankowska, 2008), moreover, the environmental sustainability issues addressed by libraries include everything from buildings and operations to collection content and programming (Antonelli, 2008; Link, 2000; Rickert, 2001).

Greening initiatives in libraries across the globe

The green movement began in the early 1990's with the first literature on 'green libraries' appearing in 1992 in "*The Green Library Journal*" but libraries became more involved in 2003 when "going green" was again recognized as an important topic (Connell, 2010). The American Library Association's (ALA) involvement was seen in the formation of the Task Force on the Environment (TFOE) which actively addressed issues on greening the library (Stross, 2009).

Evidence abounds in literature on green facilities, initiatives and environmental sustainability. There is the need for library associations to encourage the construction of green sustainable library buildings as they cost less to operate and maintain than conventional buildings, use less energy and natural resources, are more comfortable, enjoy more daylight, and are more attractive to library users and employees (Brown, 2003).

LEED certification (Leadership in Energy & Environmental Design) is the most commonly accepted standard for environmentally-friendly building design. In developed nations like Canada and the United States, many libraries have obtained LEED certification as there are policies that require new civic buildings to achieve LEED certification (Miller 2004; Urbanska, 2009).

Greening and collection development initiatives by libraries

Looking at greening efforts in collection development, there are several levels at which selection of green collection materials can take place. The first is for librarians to educate themselves about green practices, green collection resources and green programming materials, while the second level exists when librarians gather green information for their patrons (Connell, 2010).

The American Library Association (ALA, 2009) suggests several ways to support green collection through provision of open forum for green book clubs and facilities for environmental video; viewing of lecture presentations; creation of opportunities for children to get excited about ecology such as Poster competitions or poetry sound offs; election of materials on organic gardening, composting and energy conservation; set library computer links and bookmarks to environmental site issues; forge outreach relationships where local groups interested in environmental concerns and enquire about their information needs; and, work in local schools to support green curriculum and projects such as models of the ecosystems

Some scholars opine that delivering information digitally is necessarily greener than using monographs in the collection (Crumpton 2009; Urbanska 2009; Herring 2009). Though the energy usage is high, libraries are advised to choose energy star compliant computer components (Neale, 2008), consolidate servers in large institutions, recycle toner cartridges and use recycled chlorine free papers (Millot, 2008); and Link (2000) suggests the use of green topics and resources as basis for information literacy instruction sessions and publishing reviews of new green resources in campus newsletters and newspapers.

Greening initiatives in Nigeria

A good example of greening effort in Nigeria is the use of solar energy lighting in the Federal University of Technology Akure. The University of Ibadan, Nigeria also offers environmental or sustainability studies as a major or minor programme. The University of Ilorin, Ilorin,

Nigeria also has extensively embarked on greening. They have an Environmental Policy, and strive to keep the university campus environment clean, beautiful and pollution free and among other objectives, use and recycle materials when feasible; and, stimulate research on matters relating to environmental protection (Oloyede, 2010). Their project involves reclaiming land and they have beautiful well laid out landscape with trees and grass expanding over the large expanse. The air on the Ilorin campus is certainly cleaner than that in the centre of town!

An initiative by a non-governmental organization (NGO) called Nature Cares began a project on Climate Change Library in 2009, with the idea of providing education materials on environment to government schools for learning; teaching and promoting extra school events to engage young students; bridging the gap of the inadequate, outdated and lack of learning materials in schools. Nature Cares also lobbied for the construction of mini green libraries for needy schools. (Oshinawa, 2012).

Awodele, Malasowe and Onuri (2012) measured the green footprint in the Babcock University, Ilishan, Remo and developed a Generic Green IT model for possible adoption. This model proposes the use of various methods to ensure green IT in organizations and mentions a Greening game board somewhat akin to the game of Monopoly that could be used for greening awareness.

Methodology

The methods utilized in collecting data were: (i.) literature search (ii.) interviews (iii.) online administered questionnaires, and, (iv.) observation. One hundred questionnaires (100) were administered using the *SurveyMonkey* software to post to some librarians registered in the Nigerian Library Association (NLA) Online Forum over a period of three weeks. At the end of the deadline set, 42 had responded giving a 42% response rate. An interview schedule and observation checklist were also prepared, which contained pertinent items designed to elicit information towards the achievement of the objectives of the study.

Findings

Thirty one of the online respondents worked in Academic libraries, 6 in Public libraries, 3 in Special Libraries and 1 in a National Library. There were 20 male and 22 female respondents. Three were in the age range 25 – 29, nine were aged 30 - 34, and six were aged 35 – 39, 11 were aged 40-44, and four were aged 45-49, and 7 aged 50 – 54, and 2 were aged 55 - 59.

Research question 1: What is the level of awareness of librarians in Nigerian libraries on greening?

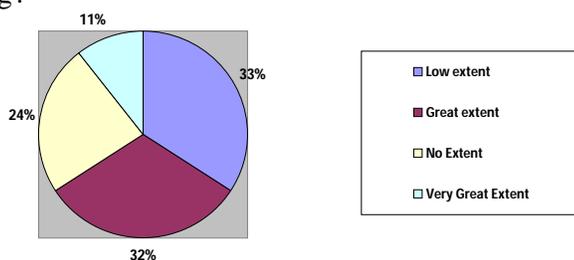


Figure 1: Level of awareness on greening

Thirteen (34%) respondents described their level of awareness on greening in libraries as being to a low extent, 12 (32%) claimed awareness to a Great Extent, 9 (24%) said their

awareness level was to No extent and only 4 (10%) described awareness to a Very great extent (See Fig. 1).

The implication of this is that the level of awareness of greening among librarians is still to a low extent hence there is a need to sensitize librarians on greening in libraries, so that librarians in Nigeria can as well conform to the trend globally in promoting a sustainable environment. When the level of awareness on greening among librarians is high, it will not be difficult for them to become

environmental literacy experts and conform to their new role of developing the environmental literacy competency of library users as opined by Abiolu and Okere (2011).

Research question 2: What is the attitude of librarians in Nigerian libraries to greening?

Seven (17%) said they were enthusiastic about greening, 24 (59%) said they are Accepting of greening, 9 (22%) claimed to have a Neutral attitude towards greening and no respondent was

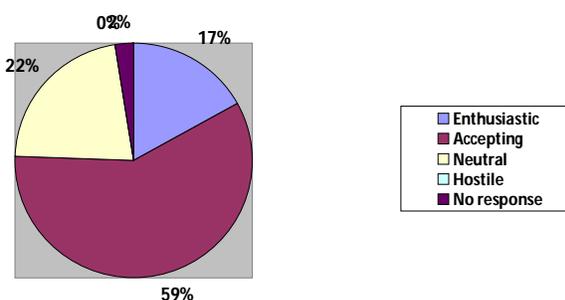


Figure 2: Attitude of librarians to greening

Hostile while 1 did not answer the question. Description of overall library staff attitude towards greening and sustainable development elicited 2 respondents claiming Enthusiastic, 25 describing the attitude as Accepting, 11 as Neutral, 1 as Rejecting, 2 as Hostile and 1 refrained from answering. Describing the overall library user attitude towards sustainability and greening, 6 felt user attitude was Enthusiastic, 13, described it as Accepting, 17 felt it was Neutral, and 5 did not answer the question.

Research Question 3: What is the frequency of performing some green initiatives in Nigerian libraries?

When asked to respond to various issues in greening and indicating frequency of performing the activities, the responses were quite varied. The results are presented in Table 1. It is revealed that librarians in Nigeria usually/ sometimes plant flowers round the library with the frequency being 34. The frequency of using safe pesticides is 27 meaning that majority of the libraries use this method in greening. 24 libraries frequently and commonly get rid of waste by composting. Twenty three usually/sometimes organize programs and special events and projects that can promote sustainability in the environment and 28 sometimes/usually use energy saving bulbs in the library. Twenty six indicated using more laptops and notebook computers than desktops.

The libraries do not consciously recycle paper as evidenced in the responses to use of paper bags, collection of paper for recycling and using online receipts (See items 6, 10, 18, 20 and 21). Eco-friendly cars are rarely used, and collection development rarely slanted towards green literature (Items 11 and 16)from the findings of performing some greening efforts in Nigerian libraries.

Table 1. Frequency of greening efforts

S/No.	Does your library.....	U	S	R	N	NR
1	Plant flowers around the library	28	6	2	4	1
2	Use safe pesticides to keep plants healthy without damaging individual's health or the environment.	15	12	6	8	-
3	Opt for natural mosquito repellent plants like catnip and citronella grass to be planted to repel mosquitoes	5	10	7	13	7
4	Get rid of waste by composting	10	14	7	8	2
5	Recycle old computers	5	8	6	17	4
6	Recycle items such as paper and ink cartridges	7	3	6	23	2
7	Purchase Kindle 2 which is an eco-friendly reading tool	4	8	2	26	2
8	Organize meetings and training workshops online through the virtual world	5	10	8	16	2
9	Hold recycling contests	2	9	3	23	4
10	Ask the public, students and library users to bring in old newspapers and other papers recycling and this may be turned into books or paper bags.	-	5	6	28	2
11	Select materials on organic gardening, composting and energy conservation	4	3	9	23	2
12	Reuse office paper for notes or printing drafts	6	10	10	14	-
13	Organize programs and special events and projects that can promote sustainability in the environment	10	13	3	14	1
14	Organize shows, talks and lectures regularly to develop environmental literacy of the community they serve	8	9	7	17	-
15	Showcase their own green progress regularly	3	11	6	19	2
16	Use eco-friendly cars as bookmobile	3	5	6	27	-
17	Have a blog to spread awareness about their library's green activities regularly	7	7	-	25	2
18	Cut down on paper notices and make it easier for patrons to keep up with their accounts by making them accessible online	4	7	5	20	1
19	Grow a garden to spread awareness on sustainability and provide a healthy eating option for participating library patrons and workers	3	7	6	23	1
20	Use compostable library cards	9	9	3	15	4
21	Encourage the use of reusable bags and not plastic bags	7	4	5	22	2
22	Use less or no paper receipts by asking patrons to access account online to discover when a book is due	2	10	6	21	1
23	Encourage library users to carry their library books in reusable bags, not plastic ones	4	6	4	24	2
24	Use energy saving bulbs	17	11	6	5	1
25	Use more of laptops and notebook computers rather than desktop	14	12	8	7	-

Key: U= Usually S= SometimesR=Rarely N= Not at all NR= No Response

Interview Findings

The interview method sought further information on the existence of library policy on greening, efforts at greening libraries, and ways of further advancing greening for sustainable development. Sixteen librarians from different types of libraries were interviewed. They indicated mainly that the libraries did not have greening policies as such, but rather performed activities that eventually contributed to environmental sustainability. The summary of their responses is presented below as pluses and minuses of keeping the library eco-friendly.

(+ + +) Pluses of Nigerian Libraries:

Indoor efforts:

The efforts put in indoors yield the following pluses:

- Installation of ceiling fans to cool down the library without overusing the air conditioner is common in Nigerian libraries.
- Windows are strategically placed to provide natural light and to help with heating or cooling costs.
- Eco-friendly light bulbs are commonly used to minimize heat and to cut down on electricity usage and bills.
- Most libraries in Nigeria search for eco-friendly versions of computers if the need for purchase arises.
- Laptops and notebooks have replaced desktops because they use less electricity than desktop computers.
- Computers are cleaned with eco-friendly, safe computer cleaning materials such as using biodegradable dust cloths and old t-shirts.
- In an effort to cut down on paper, card catalogues are now being converted to online versions accessible from libraries' websites.
- Librarians now communicate more using e-mails instead of mailing out paper. Newsletters are e-mailed to announce special events and keep in touch.
- Newspaper and magazine archives are being moved online to help preserve the originals.

Outdoor efforts:

- Libraries plant in-season, local flowers and shrubs around the library. Flower pots are also kept outside some libraries or branch libraries not located on ground floors.
- Safe and/or natural pesticides are used to help keep plants healthy without damaging individual's health or the environment. Options for natural mosquito repellent plants like catnip and citronella grass are taken, to repel mosquitoes.
- Waste is gotten rid of by composting. This is done by maintaining holes for the compost.

(- - -) Minuses of Nigerian Libraries:

- Indoor plants are rarely planted or kept within the library.
- There is hardly any recycling of computers, rather they are thrown away or abandoned in some rooms.
- There is no conscious recycling of items such as paper and ink cartridges which often constitute nuisance in the environment. This habit is only creeping in slowly through some suppliers who have adopted the method of recycling the products but presenting them as brand new.
- Low or no purchase of Kindle 2 which is an eco-friendly reading tool because it is expensive and may upset some reading purists who wish to carry the physical book.

- Meetings and training workshops are rarely done online through the virtual world in Nigerian libraries. Instead employees travel to or drive to conferences, unfortunately building up stress in the process.
- Many Nigerian libraries are not in the forefront of organization of programs, special events and projects that can promote sustainability in the environment. This is because special events like contests and seeking environmental grants to raise awareness and become a greener library is not feasible in most Nigerian libraries due to inadequate funding.

Recommendations and Conclusion

Libraries should seek funding for greening projects if their institutions cannot provide it. Certain grants awarded by environmental agencies or the government will help libraries with funding green projects and renovations. Libraries should start a paper drive, by asking the public, students and library users to bring in old newspapers and other papers for recycling.

Recycling contests could be held between departments, individuals, or against other libraries. This will create more awareness for greening in libraries generally. Displays and exhibitions about reducing individuals' carbon footprint would also not be out of place. Shows, talks and lectures should be regularly organized to develop environmental literacy of the community libraries serve. Library Associations can collaborate locally, nationally, and internationally to build stronger greener networks, training, fundraising and building green collections for a more sustainable environment.

In conclusion, libraries need to be greener in terms of collection development and design of their buildings. Libraries would do well to showcase their own green progress regularly, probably through starting a blog to spread awareness about their library's green activities. All these efforts would definitely produce better green momentum in libraries and achieve a more socially responsible global profession and professionals - Greener libraries and librarians!

References

Abiolu, O.A and Okere, O.O. 2011. Environmental literacy and the emerging roles of information professionals in developing economies. A paper presented at the World Library and Information Congress: 77th IFLA General Conference and Assembly 13-18 August 2011, San Juan, Puerto Rico. Retrieved 24th March, 2013 from <http://conference.ifla.org/ifla77>

Al, R. and House, S. 2010. Going Green in North American Public Libraries: a Critical Snapshot of Policy and Practice. A paper presented at the World Library and Information Congress: 76th IFLA General Conference and Assembly 10-15 August 2010, Gothenburg, Sweden. Retrieved 18th March, 2013 from <http://www.ifla.org/en/ifla76>

Aldrich, R, S. 2010. "A Deeper Green". *Library Journal* 135.5: 45. *ALA Connect: Green Libraries*. American Library Association. Retrieved 12th March, 2013 from <http://connect.ala.org/node/71711>

American Libraries. *New York Library Breaks New Ground with Nature Explorium*. (24 March 2010). Accessed 24th March, 2013 at <http://americanlibrariesmagazine.org/greenyour-library/new-york-library-breaks-new-ground-nature-explorium>

Antonelli, M. 2008. "The Green Library Movement: An Overview of Green Library Literature since 1979 to the Future of Green Libraries". *EGJ* 27 (Fall 2008). Accessed 12th March, 2013 <http://escholarship.org/uc/item/39d3v236>

Awodele, O., Malasowe, B. O. and Onuri, E. E. (2012), Greening the Campus: Design of a Generic Green IT Model for Possible Adoption. A Case Study of an Educational Institution In Nigeria, *Asian Journal Of Computer Science And Information Technology*, 2, 6; 129–136.

Brown, B. 2003. "The New Green Standard." *Library Journal*. 128.20: 61-64.

Board Policy A.14, Environmental Sustainability. Ottawa Public Library/Bibliothèque publique d'Ottawa. 14 December 2009. http://bibliooottawalibrary.ca/archive/board/2009/091214/091214_8.pdf

Environmental Sustainability in the Built Environment – Challenges and Benefits of "Going Green" in Nigeria, *Realestate Insight*, Friday, April 30, 2010. Accessed at <http://www.iucn.org/?uNewsID=10628> on 2nd April, 2012.

Girling, C. and Kellet, R. 2005. *Skinny Streets and Green Neighbourhoods: Design for Environment and Community*. Washington, Island Press.

Going Green @ Your library. [blog] *Conference Bag Exchange Idea*. (15 March 2010). <http://greeningyourlibrary.wordpress.com/2010/03/15/conference-bag-exchangeidea/>

Jankowska, M. A. (2008). A call for sustainable library operations and services: A response to ACRL's 2007 environmental scan. *College and Research Library News*, 69(6), 323-324. Retrieved from <http://crln.acrl.org/content/69/6/323.full.pdf+html>

Link, T. (2000). Transforming higher education through sustainability and environmental education. *Issues in Science and Technology Librarianship*. Accessed 12th March, 2013 at <http://www.istl.org/00-spring/article4.html>

Miller, K. (2010). Environmental literacy and green volunteer opportunities for your community. *Public Libraries Online*. Accessed on 13th March, 2013 at: www.publiclibrariesonline.org

Miller, T. (2004). "Canada's First 'Green' Library." *Feliciter*, 50.6 (2004): 254. Print. Norton, Judith. "A How-To: Conduct An Environmental Audit in your library". *Oregon Library Association Quarterly* 13.4.: 7-12.

Moore, S. (2005). Waste not... *Public Library Journal*, 20(3), 25-27.

New York Public Library. *Bronx Library Centre*. (2010). Web. 31 March 2010. <http://www.nypl.org/locations/bronx-library-center>

Oloyede, I. O. (2010). Greening and Sustainable Environment: University Campuses as a Model for the Nigerian Society. Global University Network for Innovation, 2010, Retrieved on 23rd April, 2013 from <http://www.guninetwork.org/resources/good-practices/good-practices-listing/greening-and-sustainable-environment-university-campuses-as-a-model-for-the-nigerian-society>

Reynolds, H. L., Brondizion, E. S., Robinson, J. M., et al. (2010) *Teaching environmental literacy across campus and across the curriculum*. Accessed on 28 March 2013 at: <http://www.scribd.com/doc/38708623/Teaching-Environmental-Literacy-Introduction>

Rickert, K. (2001). "Greening" our college libraries: Complete the cycle of the three Rs. *College and Research Library News*, 62(8), 825-827. Retrieved from <http://crln.acrl.org/>

Urbanska, W. 2009. "A Greener Library, A Greener You." *American Libraries* 40.4, (2009): 52-5.