GREEN LIBRARY (GL) AND ROLE OF GREEN LIBRARIAN

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Abstract: Today's communities and world at large is becoming environment sensitive. Various green oriented concepts and movements have been emerged over a period of time, which have a significant relevance to the natural environment. "Green Library (GL)" is one of such concepts and movements. Environmentally conscious people and library users i.e. academicians, students, and others etc. around the world are looking at and expecting that libraries of today should not only an information resource center but also a green place. The creation of green libraries is approaching a tipping point, generating a "Green Library Movement", which is comprised of librarians, libraries, cities, towns, college and university campuses committed to greening libraries and reducing adverse impact on environment. Constructing a green library building using a performance standard like LEED is one of the ways some libraries are choosing to become green and sustainable. Environmental challenges like energy depletion and climate change is influencing the type of information resources and programs libraries are providing to their communities.

This research article highlights concept of green library; lists out essential features of green library; states some reasons for going green; and also brings out role of today's librarians in implementing the concept of green library successfully; and also.

Index Terms: Green Library, Green librarian, Green Library Movement, Sustainability, LEED (Leadership in Energy and Environmental Design), IGBC (Indian Green Building Council).

1. INTRODUCTION

With the advancement of modern technology, life style of human being in the way towards development is changing at a rapid speed. The word "Green" has a great importance here for a healthy survives. Over the last few years there is an increasing interests towards becoming green in every sector and the field of Library and Information Science (LIS) is no exception to this (Meher, P. & Parabhoi, L. 2017).

Enthusiastic library users are calling on libraries not just to provide popular services but to communicate a clear green identity. Libraries as gateways for knowledge are particularly responsible not only for disseminating an idea of sustainability but also for leading by example and thus serving as exemplars. Small steps in going green can have a big impact on the library's image. There is a wide range of ways to promote an idea of "Green Library (GL): Use of environmentally friendly or recycled materials, virtual user services and resource-saving copy services, waste separation, elimination of plastic bags, no more paper cups and instead recycled/private crockery, fair-trade coffee in the library's coffee shop, organizing green events and choosing library suppliers with green certificates."

The concepts of "Green Library (GL)" and "Green Library Movement" have been in existence over more than two decades. The green library movement has been emerged in the early 1990s and has gained popularity in the field of Library and Information Science (LIS) profession. It mainly comprises growing number of librarians, libraries, cities, towns, college and university campuses those are committed to greening libraries. This innovation is happening by building green library buildings, by greening existing library facilities, by providing green library services, and by embracing environmentally supportive and sustainable practices within the library (Antonelli, M. 2008).

The interconnected topics of sustainability, green libraries, role of librarian while going for green have received a great deal of coverage in recent years in the various publications targeted towards the role of modern libraries and librarians. Many librarians and other information professionals are taking initiatives and actions to ensure that their workplaces will be a green place i.e. environment or eco friendly. However, this mainly depends on working with institutional initiatives or working out what needs to be done and by gaining institutional support for action plans. Basically, a green library is an essential part of the larger green building movement. Also known as sustainable libraries, green libraries are being built all over the world, with many high profile projects bringing the concept into the mainstream.

2. REVIEW OF LITERATURE

The authors have referred literature related to "Green Library" or "Sustainable Library" and "Green Library Movement", some of which is summarized below.

Meher, P. & Parabhoi, L. (2017) in their research article titled, "Green Library: An Overview, Issues with Special Reference to Indian Libraries" stressed upon growing interest on green revolution and mentioned that the field of library and information science is no exception to that. Antonelli, M. (2008) in her article titled, "The Green Library Movement: An Overview and Beyond" explained about different web pages and websites related to green library building. Shah, L. et.al., (2015)

in their article titled as, "Green Libraries in Academic Institutions: Need of the Hour" stated that how negative impacts can be minimize and positive impacts can be maximize by following certain guidelines while constructing green library and inculcating the elements of green library. Nikam, S. S. (2017) in his informative article titled, "Green Library: An Emerging Concept" has explained the concept of green library along with its features and role of green librarian. Yudelson, J. (2007) in his book titled as, "Green Building A to Z: Understanding the Language of Green Building" has offered the basics of green building and shown how it relates to key issues such as, water conservation, healthy buildings, use of recycled materials, reduction of carbon dioxide, and environmental site planning. LeRue, J. & LeRue, S. (1991) wrote the lead article entitled, "The Green Librarian" in which they explained in detail how to be environmentally supportive at home and in the library. "The Library as an Environmental Alternative (Among Other Things)" is the contribution of Steven, S. (1991), in which he discussed the spatial limits of library and nature, and the role libraries need to play in preserving both. Further, Cantú, A. & Andersen, B. (2003) in their case study based article titled, "It's Not Easy Being Green But it Sure is Fun: Sustainability Programming at the Ann Arbor District Library" have focused on a programs like alternative fuel vehicles, wildlife ecology puppet show, sustainable home tour, green journaling, and the showing of some films. "Go Green" is an article written by Neale, J. C. (2008), described how libraries can be more eco-friendly and has given particular attention on to the green strategies that libraries can use will help the planet, save money, and inspire others. In one another article titled, "Green Reading: Resources for the Sustainability-Minded" written by Sotak, D. & Zeidman-Karpinski, A. (2014) they have explained in detail the concept of green reading. Trotter, D. W. (2008) through her article "Going for Green" has discussed about three environmentally friendly libraries and offered tips on how librarians can make libraries greener. And Rabidas, S. (2016) in his lead article titled, "Green Library Buildings: A Sustainable Process" has covered issues like what green library building is, how they are accredited, what are the things required for, and also what is the future of Green Library Buildings in our modern India.

3. MEATERIALS AND METHOD

This article is the outcome of the initiative and creative thinking of the authors supported by thorough review of relevant literature. The discussion and deliberations in this article is based on the concepts, definitions, ideas, theories, discussions etc. derived from various websites, dictionaries, and relevant research articles/papers made available from different journals. All the sources used by the authors are duly acknowledged in the text of this article.

4. RESULTS AND DISCUSSION

4.1 Concept of Green Library: Now days the word "Green" has become buzz word in almost all the fields and every walk of human life. The word is very much concerned with energy depletion, climate change, green house effect, global warming and its abuses, so that people want everything to be green to save this planet on which they live. Basically, minimum negative impacts on to the natural environment and maximum indoor environment quality by means of careful selection of site, use of natural construction materials, and conservation of resources and responsible waste disposal is termed as "Green" (Shah, L. et.al. 2015).

When librarians talk about green libraries what usually comes to mind is green library buildings. The term "Green Library (GL)" refers to "a library that contributes towards maintaining the natural ecological balance in the environment, and preserving the planet and its natural systems and resources." Green Library (GL) has many meanings, including preserving natural resources for the future, living in a carbon-neutral way, and meeting the needs of community.

The Online Dictionary of Library and Information Science (ODLIS) defines Green/Sustainable Libraries as, "a library designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection; use of natural construction materials and biodegradable products; conservation of resources like water, energy, paper, and responsible waste disposal recycling, etc." And the term "Sustainability" is defined as, "the capacity to meet the needs of present generation without compromising the ability of future generations to meet their own needs."

Further, according to New World Encyclopedia, the term "Green Library (GL)", also known as "Sustainable Library" is, "a library built with environmental concerns in mind."

Under the US Green Building Council's LEED performance system, "a green library building is one that is built by incorporating the design elements like sustainable site selection and development, conservation of water, energy efficiency, use of local resources, conservation of material and waste reduction, indoor environmental quality, and innovation in design."

According to Indian Green Building Council's guidelines, "a green or sustainable library is the structure that is designed, built, renovated, operated, or reused in an ecological and resource efficient manner."

Thus, there is no univocal definition of a green library. However, to summarize it can be said that green library is the library i.e. a place or a building, which has minimum possible negative impact on to the natural environment and has a good quality environment both in and outside of it. Many library professionals of today are working on the idea of green library by inculcating essential elements like use natural and regional construction material, minimize consumption of water and electricity, and use of environment friendly technology. Though it is in initial stage of development we need to understand that a green or sustainable library is the structure that is designed, built, renovated, operated, or reused in an ecological and resource efficient manner. And we know that there are wide range of ways to promote the idea of green library such as use of environment friendly or recycled and regionally available materials, optimal use and conservation of natural resources, virtual user services and resource-saving copy services, waste separation, elimination of plastic bags, no more paper cups and instead use of recycled/private crockery, fair-trade coffee in the library's coffee shop, green events and choosing library suppliers with green certificates.

4.2 Essential Features of Green Library: Green library is mainly characterized as an environment or eco friendly library; or sustainable library. According to the standards lay down Indian Green Building Council (IGBS) and U.S. Green Building Council (USGBC), green library is a library designed to minimize negative impact on the natural environment and maximize indoor environmental quality by all possible means and measures. Thus, every green library i.e. a place or a building necessarily possess certain essential features like -

- Carefully selected location or most suitable site, which allows construction of sustainable building
- Use of natural, recycled and regionally available construction materials, which make library building eco friendly
- Use of reflective roofs and flouring ensuring natural sunlight, which leads to energy and cost saving
- Use of insulating windows, which are noise and dust resistant; and useful for maintaining temperature inside
- Measures for conservation of resources like water, energy, and paper leading to optimum utilization and saving of costs
- Use of energy-efficient lighting for minimizing consumption, which leads to savings in energy and reducing costs
- System for optimized cooling, which provides for pleasant and healthy environment
- Suitable plantation both inside and outside of building, which offers healthy atmosphere everywhere
- Arrangements for circulation of fresh and healthy air, which leads to healthy and hygienic environment
- Use of environment or eco friendly technology, which causes less harm to the ecosystem
- Use of ICT in a planned and systematic manner, which offers numerous benefits to both library management and users

Thus, the term "Green Library" is often used specifically to describe a library building, which is built by using standards or guidelines like LLED. It can also refer to a library, which is becoming more environmentally sustainable in significant ways, whether by using nontoxic cleaning supplies, reducing energy consumption, or collecting and promoting materials with environmental themes. Basically, green design is an integrated process. Always remember that no one aspect of a building's architecture makes it a green architecture. Without proper integration right from the early stages of the planning phase, redundancies can occur, and can eliminate many of the potential benefits of sustainable design. Good sustainable design always capitalizes on the synergistic relationships that occur between the various elements like site selection, water conservation, energy conservation, construction/building materials, indoor air quality etc. (Nikam, S. S. 2017).

Some of the prominent examples of green libraries which have followed and introduced both national as well as international standards, and introduced above mentioned features in their library premises and building mainly includes Anna-Centenary Library, Chennai; Perma Karpo Library, Ladakh; National Library of India, Kolkata; Karnataka University Library, Karnataka; NIT Library, Silchar Assam; NIT Library, Trichy; Delhi University Library, Delhi; Madras University Library, Chennai; and Mumbai University Library, Mumbai.

4.3 Role of Green Librarian: Role of library professionals is very crucial in the "Green Library Movement". They should always aware about the fact that green library is not just about taking care of the environment, it is about taking care of the health and well-being of those who work in it and patronize it. In the mission of making green library, librarian should always put their efforts to promote green library movement by -

- Encouraging users to use e-books, e-journals, etc., which can work as space, paper saving tools, and also leads to reducing costs
- Undertaking practices like making soft copies, microfilming of old and scares books and by weeding-out of old and outdated books, which help in optimum utilization of space
- Using different electronic medias and online communication tools like social media, which offers a number of benefits to both library management and users
- Working under eco-library system and identifying those people who are willing to work under such an environment, which may strengthen the movement
- Promoting green library tools, techniques and encouraging others to use the same, which may ensure active participation of all those concern
- Encouraging other librarians to go for green library by discussions, seminars, and conferences, which may help to joining hands together
- Handling and managing the library budgets to support the organizations, which may ensure optimum utilization of financial resources and ensure economies in operations
- Using wooden furniture and other bio-degradable material making the place quite eco friendly and sustainable one
- Using wool bricks instead of burnt bricks as construction material, which is considered as eco friendly material
- Using solar tiles or panel i.e. reflective material for library roofing so as to ensure maximum use of renewable energy
- Using recyclable paper insulation which considered as an ultimate trick to make environment friendly building
- Making use of bamboo, fiber, etc. by replacing steel material, which is also considered as eco friendly material
- Taking necessary steps for conservation of energy, water, paper, etc., which not only allows big savings in resources, costs but also brings about sustainability
- Making rooftop planting which can be act as a good idea, and can facilitates better control over temperature
- Making suitable plantation including lawn both inside and outside of library to minimize dust and make environment cool (Meher, P. & Parabhoi, L. 2017).

Thus, librarian must have to play multifaceted role in the green library movement so as to appear himself as a "Green Librarian".

4.4 Reasons for Green Library: As we know, green library means a library built with intent to protect the environment and community. There are several reasons why libraries would want to build green or incorporate green features into their buildings. First, the cost of constructing green buildings has become affordable. It is now possible for libraries to build green buildings on conventional budgets. Second, most readily available energy resources are finite resources. It is vital to the health of the planet and our libraries' budgets that we use these energy resources prudently (Yudelson, J. 2007). Third, it is important that we reduce the carbon footprint of our buildings (Time for Change, 2008).

5. CONCLUDING REMARKS

People around the world should agree upon the fact that our planet is under stress. This means people and institutions will need to change their behaviors so that they can begin repairing the planet. The present time is right for librarians to step up and help communities become green and sustainable. Basic role of the libraries as an organization is to serve their communities, which mainly include academicians, students and others. Communities need libraries and librarians to act as role models for sustainability by providing accurate information in all manner of green topics, from alternative building practices to renewable energy options. The present time is also right for librarians to support and continue to grow the "Green Library Movement".

A library always facing problems like space and budget in the same way the books has been facing problems from dust, moisture, fungus and it needs special care. Green or sustainable library is the modern library where minimum electricity consumption and maximum use of renewable sources like air, sunlight, woods etc. take place. Now days, it is much more needed for every library to greening its environment. Librarians should take some rational decisions to make green library, and also take part in the green library movement. Many national and international bodies are extending their help to build green library. Some of the Indian libraries have been trying to make green library movement successful and librarians should take initiatives and participate in the green library movement to make it more fruitful.

6. ACKNOWLEDGMENTS

7. REFERENCES

[1] Antonelli, Monika (2008). The Green Library Movement: An Overview and Beyond. Electronic Green Journal, UCLA Library, UC Los Angeles. Vol. 1, Issue 27, January, 2008. ISSN: 1076-7975. Pp. 1-12. Available at: https://escholarship.org/uc/item/39d3v236

[2] Cantú, Amy and Beth Anderson (2003). It's Not Easy Being Green, but It Sure is Fun: Sustainability Programming at the Ann Arbor District Library (Electronic Version). July-August, 2003. Public Libraries, 42.

[3] LeRue, James and Suzanne LeRue (1991). The Green Librarian, Wilson Library Bulletin: 65, Pp. 27-33

[4] Meher, Puspanjali and Parabhoi, Lambodara (2017). Green Library: An Overview, Issues with Special Reference to Indian Libraries. International Journal of Digital Library Services (IJODLS). Vol. 7, Issue 2. April-June, 2017. ISSN: 2250-1142 (Online), ISSN: 2349-302X (Print). Pp. 1-8. Available at: https://www.ijodls.in/uploads/3/6/0/3/3603729/7ijodls217.pdf

[5] Neale, Jane C. (2008). Go Green. Library Journal. Vol. 133, Issue 2, February 2008. Pp. 46. Available at: https://connection.ebscohost.com/c/articles/28769553/go-green

[6] Nikam, Suresh S. (2017). Green Library: An Emerging Concept. Knowledge Librarian - An International Peer Reviewed Bilingual E-Journal of Library and Information Science. Vol. 4, Issue 6. November–December, 2017. eISSN: 2394-2479. Pp. 190-198. Available at: https:// www.klibjlis.com

[7] Rabidas, Sunil (2016). Green Library Buildings: A Sustainable Process. International Journal of Advance Research and Innovative Ideas in Education (IJARIIE). Vol. 2, Issue 6. ISSN: 2395-4396 (Online). Pp. 342-346. Available at: https://ijariie.com/AdminUploadPdf/Green_Library_Buildings__A_Sustainable_Process_ijariie3327.pdf

[8] Shah, Leena, Kumar, Sudhir, and Shah, Mukesh Kumar (2015). Green Libraries in Academic Instituions: Need of the Hour. International Journal of Research – Granthaalayah (A Knowledge Repository). Social Issues and Environmental Problems, Vol.3, Issue 9: SE September, 2015. ISSN: 2350-0530 (Online), ISSN: 2394-3629 (Print). Pp. 1-5. Available at: https://www.granthaalayah.com/Articles/Vol3Iss9SE/22_IJRG15_S09_45.pdf

[9] Sotak, D., and Zeidman-Karpinksi, A. (2014). Green Reading: Resources for the Sustainability-Minded. Origin Library Association (OLA) Quarterly, Vol. 13, No. 4. July, 2014. ISSN: 1093-7374. Pp. 25-28. Available at: https://dx.doi.org/10.7710/1093-7374.1181, https://commons.pacificu.edu/olaq

[10] Steven, Smith (1991). The Library as an Environmental Alternative (Among Other Things). The Free Library: By Farlex. Available at: https://www.thefreelibrary.com/The+Steve+Smith+explosion.-a0145376857

[11] Time for Change. (2008). What is a Carbon Footprint? - Definition. Available at: https://timeforchange.org/what-is-a-carbon-footprint-definition

[12] Trotter, Dorthy Waterfill. (2008). Going for the Green. American Libraries: 39, Pp. 40-43.

[13] Yudelson, Jerry (2007). Green Building A to Z: Understanding the Language of Green Building. Gabriola Island, B.C.: New Society Publishers. ISBN: 9781550923513 155092351X 0865715726 9780865715721. Pp. 1-219. Available at: https://www.worldcat.org/title/green-building-a-to-z-understanding-the-language-of-green-building/oclc/244770695

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