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Adopting Green Practices: Challenges for University Libraries of Pakistan

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Abstract

A green or sustainable library seeks to maximize the use of natural and renewable resources. The adoption of green practices in libraries of developing countries like Pakistan is much needed where water and energy resources are scarce and unsustainable. This move from conventional to green libraries also poses certain challenges. This study aims to explore the challenges encountered in the adoption of green library practices in the university libraries of Pakistan. The scholarly literature is reviewed to encompass the dimensions and challenges of a green library in the global context. The feedback from the selected, senior university librarians of Pakistan regarding challenges and their solutions in adopting green library practices is collected through interviews. These challenges include a lack of awareness about green libraries and practices, policy for green libraries, technologies for a paperless environment, awareness regarding the use of natural construction materials and biodegradable products, awareness regarding the use of natural and renewable energy sources, and seriousness of librarians and management. The experts also suggest required skills and resources to overcome these challenges comprising knowledge about green libraries and practices, paperless environment, space management, solar panels, glass windows, skills regarding the use of renewable energy sources, and the ability to find out the environmental impact of a resource. This study may also be useful for libraries in other developing countries.

Keywords: Green library, Environment-friendly library, Sustainable library, Challenges, Skills, Resources, University libraries, Pakistan.

Introduction

Global warming and climate change pose a challenge to the world with harmful consequences for human life. Implications urge to go green in all sectors of life including libraries. Reitz (2014) defines a green/sustainable library as "a library designed to minimize the negative impact on the natural environment and maximize indoor environmental quality through careful site selection, use of natural construction materials and biodegradable products, conservation of resources (water, energy, paper), and responsible waste disposal (recycling, etc.)." The concept of a green library has been defined with different aspects by different authors. International Federation of Library Associations and Institutions (IFLA) worked rigorously on this concept to conclude a checklist (Hauke, P., Latimer, K., & Werner, K.L., 2013). A 12-point IFLA checklist of green libraries summarized below comprises areas of planning, development, and library service.

1. Project planning, finance. This phase includes discussion about sustainability goals, true direction, level of go-green, design of the building, construction cost, resources, and other budget-related matters.

2. Tendering. This phase of necessary measurements includes the formulation of specific criteria for sustainability, definition of the ecological footprint of the library, statement of specific environmental objectives, requirements for a holistic view of sustainability issues, and verification of certificates.

3. Site/location. The site selection process ensures that the site is in a residential area and relevant facilities are nearby so that residents do not have to drive far for various services. Climate, conditions, emissions, and noise should also be in mind while selecting the site/location for the library.

4. Construction. Only materials that contain very little waste to save the finance and goods that do not damage or harm the natural environment should be chosen.

5. Building. A green/sustainable approach to library buildings acknowledges the essential value of ensuring the health and comfort of building occupants by considering factors such as air, solar protection, revolving doors, vestibules, natural light, and sensors' lighting system efficiency.

6. Interior fitting. IFLA recommends that the floor of the library should be carpeted. Give the preference to select the furniture made from recycled materials. Preference should be given to such a paint that has less volatile organic compounds. Choose a recyclable coating that does not release noxious odors when removing flooring.

7. Green information and communication technology. It recommends the use of remote access, thin clients instead of PCs, energy star hardware, switchable sockets, and the use of software to optimize energy consumption. Green ICT supports the less use of paper. Green ICT can also be implemented in other ways such as self-check-in and check-out through software, online membership, OPAC, e-receipts, scanning instead of printing or photocopying, and so on.

8. User services. It suggests that the use of digital format should be encouraged instead of print format to keep the environment clean. Electronic communication should be used in place of paper-based postal communication.

9. Library management. This includes environmental management certificates, facilities management, and the green library office. Environmental management certificate [ISO 14000] includes motivated library staff, legal agreements, transparency in financial

matters, and responsibility for sustainable goals. Facilities management promotes the use of vacuum cleaning on regular basis, separation of waste for recycling including batteries, and use of energy-saving lamps and LED lighting. Green library office suggests the purchase of equipment from local and certified suppliers to save money, less use of paper and maximum use of digital objects, recyclable cartridges of the printer, avoiding harmful and poisonous products, and less use of things that are difficult to recycle.

   10. Strategic goal. IFLA suggests that transparency in the cost of energy should be ensured to create savings. Reward and incentive schemes should be introduced to attract the intentions of staff towards green operations. Librarians can also influence their business partners, i.e. publishers, booksellers, and suppliers, to participate in the going green initiative of the library.

   11. Marketing and PR. Library staff should promote the motto "a green image is a good image." To generate funds, library staff can share this concept with stakeholders, i.e. users, publishers, vendors, donors, and friends.

   12. Certificates. This includes the adoption of green building certificates. There are different green building standards available, e.g. LEED (US Standard), BREEAM (UK Standard), and Green Star Rating System.

Objectives of the Study

   Based on the feedback from experts, the primary objective of this study is to highlight the challenges of adopting green practices in the university libraries of Pakistan. The secondary objective is to find a solution for the successful implementation of a green initiative.

Research Questions

   The objectives of the study can best be interpreted in the following research questions.
1. What are the challenges for Pakistani university libraries to adopt green practices?
2. What is required by Pakistani university libraries to implement the green initiative?

Literature Review

   The challenges of adopting green practices in libraries have been discussed in the scholarly literature under various headings summarized below.

Consumption of Energy in Libraries

   Globally, the increased demand for energy is a common problem for all kinds of libraries. According to Jones and Wong (2016), lowering energy demand and related costs is a particular concern due to the libraries' long operating hours. Lack of energy and an increase in the use and cost of energy and water are among the major challenges in the green library initiative (Antonelli, 2008; Binks et al., 2014; Kruse, 2011).

Absence of Sustainable Policies in Libraries

   Libraries in developing countries are often poorly adapted to environmental policies. Jankowska and Marcum (2010) discovered that university libraries had been reluctant to establish their sustainability indicators or accept those of other organizations. There was no policy or recommendation on waste management (Dempsey & Palilonis, 2012) and environmental strategy for library collection (Brodie, 2012; Marcum, 2009).

Adoption of Green Libraries as a Challenge

Fourie (2012) reported that the majority of the people didn't give importance to the go green initiative and climate change as an issue. Boyden and Weiner (2000) argued that the lack of taking initiative was a significant hindrance to improving sustainability in libraries. Chowdhury (2012) and Dempsey and Palilonis (2012) viewed a lack of understanding among consumers and library staff as a major challenge in adopting green practices. According to Turner (2014), due to the absence of sustainability in the LIS curriculum, there was a failure to provide the perception of the green library to library graduates.

Transitioning from Print to Electronic in a Green Way

One of the most difficult challenges for new green library spaces is to be built for people instead of books. Seeking a budget to purchase technology for green transfer, i.e. from paper to digital, is a big obstacle (Flinchbaugh & Murtha, 2019).

Rapid Technological and Digital Advancements

The rapid change in digital technology and digital advancements has been identified as a major obstacle in long-term green initiatives. According to Li (2017), libraries are particularly threatened by rapid technical and digital developments in embracing green practices. Wolfe (2012) is of the view that green technologies alone are insufficient to ensure sustainability. Kruse (2011) argues that continuous technological developments in library equipment and related resources have a detrimental environmental effect.

Inadequate Funds

The unavailability of adequate funds is a common barrier to any initiative in libraries in developing countries. According to Idiegbeyan-Ose et al. (2019), insufficient funding for public libraries in Nigeria prevents them from providing modern materials and services.

Research Methodology and Limitations

The qualitative method was used for this research study. Firstly, a review of accessible scholarly literature was conducted to encompass green library practices and the associated challenges. Secondly, a purposive sample of three university librarians was drawn for seeking their feedback with their prior consent regarding these challenges and required skills and resources. However, only two of them responded. Owing to time constraints, the sample was limited to Islamabad, the capital of Pakistan. However, the librarians selected were the most senior and experienced ones. The selection of university libraries was because of their better standing than other types of libraries in terms of collection, physical and human resources, space, budget, infrastructure, users, and so on. Data collected from librarians through open-ended, written interviews via email were analyzed thematically.

Data Analysis and Interpretation

A document containing the checklist of green librarianship and the associated challenges based on a scholarly literature review was sent to the selected experts for their feedback. The data collected from university librarians through interviews are interpreted below against each research question.

RQ1. What are the challenges for Pakistani university libraries to adopt green practices?

The experts agreed to the challenges this study reviewed in a global scenario. They further emphasized the particular challenges of adopting green practices faced by the university libraries of Pakistan. These challenges include a lack of awareness about green libraries and practices, policy for green libraries, technologies for a paperless environment, and awareness regarding the use of natural construction materials and biodegradable products. Moreover, they opined that lack of awareness regarding the use of natural and renewable energy sources and seriousness of librarians and management towards green practices are the major challenges.

RQ2. What is required by Pakistani university libraries to implement the green initiative?

The experts identified the skills and resources required in university libraries of Pakistan to implement the green initiative. One of the experts opined that university librarians should be skillful in managing space for solar panels and glass windows and a paperless environment. He further added that a university librarian should have the skills regarding the use of natural and renewable energy sources and plantation of green trees to be less dependent on fossil fuels. The other expert opined that university librarians should be sensitive about environmental sustainability and they should dispose of hazardous waste materials. He further added that ability to find out the environmental impact of a resource is necessary for librarians to implement the concept of green library practices.

Conclusions

This study conducted qualitative interviews of selected, senior university librarians of Pakistan to find out the local challenges and required skills and resources to implement the green initiative. These challenges are summarized as a lack of awareness of green libraries and practices, policy for green libraries, technologies for a paperless environment, awareness regarding the use of natural construction materials and biodegradable products, awareness regarding the use of natural and renewable energy sources, and seriousness of librarians and management towards the green initiative.

The required skills and resources are summarized as managing space for solar panels and glass windows and a paperless environment, using natural and renewable energy sources, plantation of green trees, sensitivity to environmental sustainability, disposal of hazardous waste materials, and ability to find out the environmental impact of a resource. The findings of this study lead to the following recommendations:

- Launching of awareness campaigns on regular basis using different platforms, e.g., formal and informal discussions, seminars, social networking sites, listserv, and WhatsApp professional groups.
- Education of LIS students on green library services for preparing informed, future librarians.
- Promotion of sustainable library collections such as e-books and e-journals.

- The initiative from the government by giving grants and financial assistance to encourage green libraries.
- Formulation of special groups and expert committees by the Pakistan Library Association (PLA) to provide awareness and assistance in this regard.
- Use of sensors to illuminate places in the library when in use.
- Use of document scanning instead of printing/photocopying.
- Growing indoor plants to improve air quality.
- Use of laptops instead of desktop computers to save power.
- Replacement of old energy-consuming equipment with new star-rated ones.
- Use of solar panels as a preferred energy source.

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