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## Green Libraries

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# Green Libraries

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## Abstract

The making of green libraries is moving toward a tipping point, producing a Green Library Movement, which is contained administrators, libraries, urban communities, towns, school and college grounds focused on greening libraries and lessening their ecological effect. Developing a green library building utilizing an exhibition standard is a way a few libraries are deciding to become green and practical. The paper examines about the different measures for greening the library other than building green library structures. It likewise advances different ideas and techniques for greening existing libraries and furthermore examine the need and significance of executing green library ideas

**Keywords: Green Library, Environmental, Green Library buildings, Green Concepts.**

## Introduction

Green libraries are very well known everywhere. The greater part of the popular libraries are changing their library structures into green climate. Least adverse consequences in the common habitat and augment indoor climate quality through cautious site choice, utilization of normal development material and protection of assets and capable garbage removal is named as Green. The word Green has an extraordinary significance here for a sound gets by. In the course of recent years there are expanding interest towards green upset in each area and library is one of them. The Online Dictionary of Library and Information Science (ODLIS) characterize green library green/practical libraries as a library intended to limit adverse consequence on the indigenous habitat and augment indoor ecological quality through cautious website choice, utilization of normal development materials and biodegradable items, protection of assets like water, energy, paper, and mindful garbage removal reusing, and so forth Our delightful nature is ceaselessly corrupted by people and creating some issues like a dangerous atmospheric deviation and environmental change. Contracting glaciers, softening ice covers and wide ranges in temperature furnish proof that something is occurring with our environment. Libraries dont come into our psyche when we consider issues like a worldwide temperature alteration

and environmental change. However, Libraries devour a ton of energy for its administrations and thus add to the issue. A sound common habitat is required for our endurance and personal satisfaction. So its about time for us custodians to assume a significant part for the advancement of climate. We can plan a green library through picking fitting site for developing library building, utilization of normal material and biodegradable items for development, protection of assets i.e., water, energy, paper and so forth and answerable for reusing of waste materials. So the ideas of green libraries are currently being famous and through legitimate planning of green library we can diminish the hurtful effect on the climate and it likewise work on the climate inside the library. The green library or reasonable library is another idea and it is acquiring ubiquity among the library experts. The paper features the states of climate, their effects on society and endeavors of driving associations towards an eco-accommodating earth, created guidelines for the improvement, green India, green library, job of a bookkeeper, elements of green library, Initiatives in India and outside India. The papers additionally examine job of drives like United Nations Development Program (UNDP), IGBC (Indian Green Building Council) and LEED (Leadership in Energy and Environmental Design).It is likewise give an outline of green library and job of current custodian to make green library. Moreover the paper center the significance of green library in continuous time and green library drives in India like Madras University Library, Karnataka college library Dharwad, Mumbai college library and Anna Centenary Library has been attempting to make an effective green library. Natural difficulties like energy consumption and environmental change will impact the sort of data assets and projects libraries will give to their networks. The measure of data accessible on green libraries and green library rehearses is restricted however keeps on developing. Library is inseparable from universality and utility. The job of library in this overall peculiarity is tremendous. Libraries are stage for deep rooted learning and furnish clients with data and information they need. Green Library Movement which includes custodians, libraries, urban areas, towns, school and college grounds focused on greening libraries and diminishing eco-debasement. This paper features the endeavors of the main associations towards an eco-accommodating earth, created norms for the improvement, green India, green library, job of a curator, highlights of green library, Initiatives in India and outside India.

Becoming Green and Sustainable (2004), Gregory notice the accompanying regions as applicable to the greening of scholarly libraries: weeded materials office paper/garbage mail obsolete PCs out of date media building utilities There are a few justifications for why libraries would need to incorporate green or join green highlights into their structures. To begin with, the expense of developing green

structures has become reasonable. It is presently feasible for libraries to fabricate green structures on regular spending plans. Second, most promptly accessible energy assets are limited assets. The soundness of the planet and our libraries spending plans that we utilize these energy sources wisely.

## **Green library**

The green library development arose in the mid 1990s and it is acquiring notoriety in the field of library and data science calling. The library proficient additionally attempting to foster such a sort of library that will be limit the power utilization, energy productive and climate amicable. However it isn't applied totally in library fields yet we are in a developing position. There is no compelling reason to give additional pressure as a top priority to comprehend green library. Green or maintainable libraries are the construction that is planned, assembled, revamped, worked, or reused in an environmental and asset proficient way (Anonymous, 2008). Its an aggregate exertion of all humanity to make green planet by lessening worldwide warming. The Online Dictionary of Library and Information Science (ODLIS) characterize green library green/feasible libraries as a library intended to limit adverse consequence on the regular habitat and expand indoor ecological quality through cautious website determination, utilization of normal development materials and biodegradable items, preservation of assets like water, energy, paper, and dependable garbage removal reusing, and so forth

## **Literature review:**

For this study we have referred some literature related to Green library or Sustainable Library and Green Library Movements. There are very few numbers of Literature have been found and gone thought literature which was relevant. (Hauke and Werner, 2013) describe the detail about the Green Library Movement and early begin of the movement in 1990s. (Antonelli, 2008) explain about different web page and websites related to Green Library Building. (Vijayalakshmi, 2014.) On his article on “Greening the Library for sustainable development” gives information about the Green Library or Sustainable libraries initiative in India and rest of the world.

## **Importance of Green Library**

The green library development arose in the mid 1990s and it is acquiring prominence in the field of library and data science calling. A Green library, otherwise called a supportable library, is a library

worked considering natural worries. Green libraries are a piece of the bigger green structure development. Libraries, especially open and scholarly libraries, are long lasting learning habitats for individuals of any age in nearby networks. Libraries are archives of information, but on the other hand are significant data assets for bringing issues to light with regards to ecological worries. Green libraries instruct people in general with regards to ecological issues through their assortments, maintainable and harmless to the ecosystem offices, and public library programs. In addition to other things, green libraries boost the impacts of regular daylight and normal wind stream; green libraries are nicely planned while considering site determination to foundational layout, energy use, materials utilized and human wellbeing impacts.

## **How to do Greening libraries**

Not every person can be so fortunate as to have a new, earth eager library building. Yet, it tends to be exceptionally viable to actually look at all parts of the structure, the board and administrations that may be viewed as natural manageable. What you can consider with another library building - feasible parts of the construction of the structure, the faades, the structure environment, ventilation, warming and cooling, the lighting, the inside fittings, green data and correspondence innovation - are generally includes that you can highlight for green advertising in the wake of opening and from which you can benefit for quite a long time. Furthermore, you can likewise actually take a look at your current structure, your redesigned or recycled library working, to distinguish every one of the spaces that can be made of economical.

## **Objective:**

The following objectives of this paper have given below:

1. To contribute little efforts to make a green earth.
2. To make use of those products which can be reusable?
3. To proper use of technology to reduce library expenses.
4. To make library modern techno savvy and give green service to patrons.
5. To save energy by making library compound greenery.
6. To create an environmental awareness among people.
7. To promote green library movement.

## **Need for Green Libraries**

All structures use assets like land, energy, water and materials to satisfy the practical necessities of a space. Accordingly, there can be no structure without natural effect. A structure is green when it is asset proficient and satisfies the practical prerequisite of the space with least adverse consequence on the climate throughout the longest conceivable time.

### **1. Reasonable Cost**

Presently expenses of developing green libraries have become reasonable and it is feasible to build or revamp the current structure affordable.

### **2. Obligation to Society**

As library is local area association. It has the social obligation to decrease the hurtful effect on climate.

### **3. Preservation of energy**

The majority of energy assets are limited and it is our obligation to utilize these assets with care for our age and people in the future.

### **4. Decrease of Carbon impressions**

Greening libraries lessen the carbon impression of our library building. The term carbon impression is characterized as the aggregate sum of green house gases created to straightforwardly and by implication support human exercises, normally communicated in identical huge loads of carbon dioxide (CO<sub>2</sub>).

### **5. Financial Benefits**

Via utilizing effective lighting frameworks and reusing of waste material and reuse of water we will actually want to get financial advantages.

## **6. Water Conservation**

Diminish consumable water use by considering elective on location water hotspots (for instance water, storm water and forced air system condensate) for custodial utilizations and latrine flushing, establishing local and versatile vegetation decreases the requirement for water system.

## **GREEN INDIA**

There are different activities are under taken by different service of administration of India to divert the method of progress to a green India and furthermore enormous organizations in private areas both broadly and globally like TERI (The Energy and asset foundation), Infosys, IKEA, Adobe, Coca-Cola, Google, HPE (Hewlett Packard Enterprise), Microsoft, Nestle, NIKE, Philips, P&G, Tata Motors intends to play a lead job to diminish the carbon economy level and help to diminish the effects of environmental change.

## **GREEN LIBRARY: INTERNATIONAL INITIATIVES**

Green libraries are quite popular all over the world and librarians are transforming their library buildings into green library buildings. There are some of the green library initiatives working in the world. This list is not exhaustive but exemplary.

1. Thomas Golisano Library at Roberts Wesleyan College (2007): This is the first academic library building to achieve a LEED Silver certification and uses various methods to make it 40 percent more energy efficient than the New York State Energy Code recommendations. Library shelves limit daylight from side windows, so the design compensated by using a large

atrium to provide natural daylight to both levels of the building. Use of white paint and solar shades reflect the direct rays of the sun and bounce light to specific areas. The internal lights respond to outside conditions.

2. Beitou's green library (2006): East Asia's most eco-friendly building. The library's large windows help cut electricity use in two ways. An abundance of natural light means less interior lighting is needed. Also, the windows are often opened wide for ventilation, thus reducing the need for fans and air-conditioning. One part of the roof is covered by photovoltaic cells that convert sunlight into electricity. The library conserves water by capturing rainfall. The sloping roof gathers rainwater, which is then stored and used to flush the library's toilets.
3. Brighton's Jubilee Library UK (2005): winner of multiple building awards including a BREEAM excellent Rating. Solar and wind energy are used to heat and cool the building naturally, except during extremes of temperature. Air is taken in from outside, circulates through the building through spaces in the walls and under the heat-absorbing floor, and is pushed out through roof vents. Rainwater is harvested from the roof, collected in tank and used in the toilets. Internal lighting automatically adjusts to the conditions. The library emits half as much carbon dioxide as buildings of comparable size.
4. Amsterdam Public Library (2007): It is the most sustainable building in Amsterdam based on BREEAM method. The library building uses a ground source heat system together with highly efficient boilers. It also makes use of free cooling from the cold air outside whenever possible. The building is equipped with abundant solar panels, it has double glazing, and sustainable materials have been used. Fayetteville Public Library,
5. Minneapolis (2004): It has earned many certificates. It has green roofing and reduced air temperature by 20 degree celsius, saving Rs. 2,40,000/- per annum energy cost. Roof water is harvested for landscaping and irrigation further reducing energy cost by 75%. Natural lights have been used for public areas. Trees were re harvested.
6. National Library, Singapore (2005): It is known as greenest building on the planet. It uses light shelves allowing light to filter into the library. Sensors dim or brighten the lights for maximum comforts.

## **Indian initiatives towards Greening India:**



India has been ranked third on the list of top 10 countries in Leadership in Energy and Environmental Design outside America, according to the latest US Green Building Council report. Canada followed by China occupies the top two ranks in the ranking of the top 10 countries for Leadership in Energy and Environmental Design (LEED) outside the US. There are numbers of Green library has situated at different part of the country. In Asia's first LEED Gold rated Library building is Anna Central Library, Chennai. There are some other green libraries are given below:

1. **Karnataka university library Dharwad:** The library stated working since 1950. The library is eco-friendly library. They facilitate. Give a green space to the students of the University. The library follows the traditional Gurukul system in this view they setup a green library environment. The main motto of the green library is to facilitate students for group discussion. The Library gives an open study space for the student with sitting, dirking and WiFi facilities, etc. The green library situated at nearest to all P.G departments so that students can get maximum benefits.





2. **Mumbai University Library:** The Mumbai University Library was setup in the year 1880. The library are made with eco-friendly equipments with wood the size of the windows are wide so that proper light get in to the library. The library gives a big open space area for the readers. The library use wood as stack materials.
  
3. **Madras University Library:** It was built in the year 1907 in Indo-British style. The library use wood material in stack areas and reference hall, periodical section reading hall. The windows are big and wide and proper lights come to the reading area and fresh air came.



Reading Hall Madras Library



Reference Hall Madras Library

4. **Anna Centenary Library (ACL):** The library was established in 2010 by Government of Tamilnadu situated at Kotturpuram, Chennai. The buildings occupy an area of 8 acres. The library is well equipping with modern technology and proper use light, air and wood. The cost of the building is 172 crore. It is one of the reputed green libraries in India which is gold rating by LEED.



Own Book Reading Section



Children's Section

**Other green libraries initiatives in India are given below:**

**5. Calcutta University Library**

**6. Delhi University Library**

**7. Perma Karpo Library, Ladakh in Indian Himalayas**

## **The Role of Green Librarian**

1. Librarian ought to consistently put forth attempts to advance green library developments by utilizing distinctive web-based devices like online media.
2. The Librarian continually ready to work under the Eco-library framework and recognize those individuals who will work in this climate.
3. He can advance green library instruments, methods to support others.
4. A Librarian can empower different curators towards green library by conversation, workshop, and meetings.
5. The green bookkeepers job is most powerful he is likewise called as eco custodian since he needs to deal with the spending plans to help the associations.
6. Use wooden furnishings and material on the grounds that these are bio degradable materials
7. Library can utilize fleece block rather than consumed block.
8. Solar tiles or board can be utilized for rooftop.
9. Paper Insulation is additionally an extreme stunt to make climate cordial structure. It is produced using paper and cardboard which are recyclable. Additionally it shields divider from fire and bugs.
10. More and more utilization of bamboo by supplanting steel.
11. Rooftop planting can be a smart thought.

## CONCLUSIONS

Libraries by their tendency are green on the grounds that their assets are shared by the bigger local area. Libraries can assume a significant part in advancing maintainable practices. Bookkeepers should go about as good examples for supportability by giving appropriate and important data identified with green issues and concerns. The initial step is thinking of an arrangement consolidating green strategies and exercises. Ultimately, this arrangement could be remembered for the mission, vision or key plans of the library. Energize interest from staff and benefactors in fostering a green drive. A showcasing system might be done to achieve mindfulness libraries green drive. These can bring issues to light of practicing environmental awareness issues and drives. Hence custodian can go about as a good example for supportability and show others how its done and make our current circumstance a superior spot to live in.

India is an agricultural nation and it ought to create in all fields. Green Buildings plays vital part in the natural insurance. Libraries and custodians are straightforwardly identified with the general public and their green structures are offering them extraordinary chances to teach the resident. The obligation of a Librarian isn't just to give data to the clients yet they should assume a part of pioneer to develop present day Green Buildings to save our common habitat. For the future, library experts should move past ecological manageability exemplified by different acts of Greening Libraries and spotlight on proactive strides to ensure future maintainable improvement of libraries. The impending LIS age, the future curators are brought to assume control over the Tomorrows Green Library drives and to get the shot at promoting the library in a new, client orientated, and maintainable way.

## References

- Dalbehera, Sanghamitra (2015). Greening the libraries for sustainable development: a case study of Technical University libraries in Odisha. In 60<sup>th</sup> ILA International Conference on Embedded Librarianship and Technological Challenges of the Digital Age, 2015. [Conference Paper].
- Divya, P.I. and Vijayakumar, K.P. (2017). Implementation of Green library techniques for Kerala University Library: A feasibility study. *Kelpro Bulletin*, 21(2), 110-116.
- Fourie, Ina. (2012). A call for libraries to go green: An information behaviour perspective to draw interest from twenty-first century librarians. *Library Hi Tech*, 30(3), 428-435, doi10.1108/0737883/211266573.
- Jones, Louise and Wong, Winky (2016). More than just a green building : Developing green strategies at the Chinese University of Hong Kong Library. *Library Management*, 37(67), 373-384, doi.10.1108/LM-05-2016-0041.
- Thomas, R. (2017). Green Libraries: India Vs International Scenario. *Scholarly Research Journal for Interdisciplinary Studies*, 4(37). doi: 10.21922/srjis.v4i37.10786
- Leena, Shah. (2015). GREEN LIBRARIES IN ACADEMIC INSTITUTIONS: NEED OF THE HOUR. *International Journal of Research - GRANTHAALAYAH*, 3(9), 1–5
- Bhattacharya, A. (2017). Green library and its utilities in modern day library service: A study. *International Journal of Next Generation Library and Technologies*, 3(3), 1–11. Retrieved from <http://www.ijnlgt.com/files/v3i3/Anindya%20Bhattacharya.pdf>

- Sunil , R. (2016). Green Library Buildings: A Sustainable Process. International Journal of Advance Research and Innovative Ideas in Education, 2(6), 342–346. Retrieved from [www.ijariie.com](http://www.ijariie.com)
- S. Bangar, M. (2018). Green Libraries in India: An Overview. Knowledge Librarian An International Peer Reviewed Bilingual E-Journal of Library and Information Science, special issue, 223–230. Retrieved from [http:// www.klibjlis.com](http://www.klibjlis.com)
- Shah, L., Kumar, S., & Shah, M. K. (2015). Green Libraries in Academic Institutions: Need of the Hour. Social Issues and Environmental Problems Journal of Research - GRANTHAALAYAH, 39035(2008), 1–5.
- Shukla, P. (2014, January 14). Green Building Materials. Retrieved from <https://www.slideshare.net/pulkitshukl/green-building-materials-30035938>