GREEN LIBRARIES AS SUPPORTERS OF UZBEKISTAN'S SUSTAINABLE DEVELOPMENT PROGRAM



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Annotation. The concept of a green library is one of the cultural achievements in the field of environment and a sign of our new duty as librarians. In recent years, the nature's critical state-of-the-art has caused many businesses and disciplines to take a step towards helping their business become green by examining the relationship between their jobs and the environment and the impact they can have on the nature. In general, green libraries can play a significant role in improving society's environmental attitude and behavior by providing various information and services. In this paper, we focus on the different dimensions of green libraries, and highlight suggestions that can be used by librarians of Uzbekistan to transform their libraries from traditional institutes to the green and socially collaborative agents.

Keywords: Uzbekistan, Librarians, Green Libraries, Environmental Issues, Sustainable Development

Аннотация. Яшил кутубхона тушунчаси атроф-муҳит соҳасидаги маданий ютуқлардан бири ва кутубхоначилар сифатидаги янги бурчимизнинг белгисидир. Сўнгги йилларда табиатнинг энг замонавий технологиялари кўплаб корхоналар ва интизомларни ўз ишлари ва атроф-муҳит ўртасидаги муносабатларни ва уларнинг табиатга таъсирини ўрганиш орқали ўз бизнесини яшил рангга айлантиришга ёрдам бериш учун қадам ташлашига сабаб бўлди. Умуман олганда, яшил кутубхоналар турли хил маълумотлар ва хизматларни тақдим этиш орқали жамиятнинг экологик муносабати ва хатти-ҳаракатларини яхшилашда муҳим роль ўйнаши мумкин. Ушбу мақолада биз яшил кутубхоналарнинг турли ўлчамларига эътибор қаратамиз ва Ўзбекистон кутубхоначилари ўз кутубхоналарини анъанавий институтлардан яшил ва ижтимоий ҳамкорлик агентларига айлантириш учун фойдаланишлари мумкин бўлган таклифларни таъкидлаймиз.

Калит сўзлар: Ўзбекистон, кутубхоначилар, яшил кутубхоналар, экология муаммолари, барқарор ривожланиш

Аннотация. Концепция зеленой библиотеки является одним из культурных достижений в области охраны окружающей среды и признаком нашей новой обязанности как библиотекарей. В последние годы критический уровень развития природы побудил многие предприятия и дисциплины сделать шаг к тому, чтобы помочь своему бизнесу стать зеленым, изучив связь между своей работой и окружающей средой и воздействием, которое они могут оказать на природу. В целом, зеленые библиотеки могут играть значительную роль в улучшении экологического отношения и поведения общества, предоставляя различную информацию и услуги. В этой статье мы фокусируемся на различных аспектах зеленых библиотек и выделяем предложения, которые могут быть использованы библиотекарями Узбекистана для преобразования своих библиотек из традиционных институтов в зеленых и социально сотрудничающих агентов.

Ключевые слова: Узбекистан, Библиотекари, Зеленые библиотеки, Экологические проблемы, Устойчивое развитие

The Way We Have Come So Far

Currently, the environmental crisis is a global issue. Humans' desire to dominate the environment and misuse it for their own benefit has led to land, water and air pollution. The harmful effects of a wrong lifestyle threaten the continuation of human life, and some analysts even talk about the extinction of the human race if the current lifestyle continues. In recent years, urbanization and consumerism have damaged people's healthy lifestyle. Currently, a significant number of social activists and advocates believe that human beings should return to their previous lifestyles and move their daily activities away from mechanical systems and fossil fuels as much as possible. Otherwise, people, society and the natural environment will be more at risk. For this purpose, strong and fruitful movements have been formed in the direction of public awareness and education of people in the field of environment and lifestyle.

In the meantime, libraries, which are cultural and social organizations, should pay attention to environmental issues more than any other organization. Libraries can play a significant role in improving society's environmental attitude and behavior by providing various information and services. Historically, libraries have been concerned about helping to reduce damage to the environment. The «Green Library Movement» was formed in the late 1990s, nearly thirty years ago, as a result of the environmental concerns of libraries. The main concern of this movement has been reducing the negative effects of libraries on the environment. To put it more simply, in recent years, the nature's critical state-of-the-art has caused many businesses and disciplines to take a step towards helping their business become green by examining the relationship between their jobs and the environment and the impact they can have on the nature. As a result of this approach, terms such as green economy, green management, and green architecture have emerged. Green library is one of the new terms and monitors the commitment of libraries to sustainable development and environment.

Professional Perspectives of Librarians: The Way Forward

Global warming, use of fossil fuels, lack of drinking water, etc. have created many problems for the environment. These problems have become strategic challenges for governments. Simply put, governments are concerned about their survival. Governments, as responsible for managing societies, are faced with the issue of providing drinking water for millions of people on a daily basis. They are looking for scientific and cost-effective solutions for waste management. They have to produce and import fossil fuels; because the transportation of people and goods and the activity of factories and companies depend on the use of fossil fuels and energy supply. These are the realities of human life on the verge of passing the first quarter of the 21st century.

Like any other social problem, the success of the environmental protection project depends on the participation of humans. The first step in ensuring the success of this project is to increase people's awareness of how the environment works and encourage them to use healthy methods and tools. For this purpose, people should be reminded of their responsibility towards the earth. Every person is expected to know enough about the planet, the past and future of human life and the best way of life. Among the people, the most expectations are from culture experts; specialists of humanities, social sciences, behavioral sciences and art and literature. Librarians and information professionals, as those who have been responsible for the process of providing, organizing and disseminating quality information for many years, have a decisive role in this field. They can focus their plans and services on the concept of sustainable development. Librarians are expected to be leaders in building and developing a culture of environmental protection and promoting a healthy lifestyle. They need to fix their lifestyle before anyone else. Less use of private cars, less use of plastic materials, maximum use of consumables and avoiding unnecessary and wasteful purchases, efforts to recycle materials, repeated use of water and soil care are among the behaviors that we librarians should follow, learn and in the next step give training to library users. Promotional programs of libraries should be set based on sustainable development.

Sustainable development could be the compass of every country's development plan. It is only in this way that the least damage is done to the nation's resources and assets. Achieving this goal requires systemic thinking. Above all, government officials are expected to consider all aspects and dimensions while planning. Librarians are also expected to help promote systems thinking among users in their field of activity. The key question is how far each of us has progressed in this field? The concept of a green library is one of the cultural achievements ▶

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in the field of environment and a sign of our new duty as librarians. The librarians of Uzbekistan, and the National Library of Uzbekistan, as the developer of the library development policy of this country, are expected to formulate a long-term plan to institutionalize the culture of environmental protection and promote the optimal methods of using natural resources, and to raise the awareness of the citizens of Uzbekistan to promote less use of paper, automatic management of correspondence and administrative affairs, digitization of archives and libraries, publication of electronic and non-paper versions of every asset, and moving towards quality and non-face-to-face information services are among the most important tasks that librarians in Uzbekistan must do to transform the libraries of this country to green libraries. Another professional consideration of librarians is green architecture. One of the main factors of having a green library and archive is how to design the building to have environmental protection components. To build a library with green architecture, components such as saving energy in various fields, using standard building materials, following the principles of local architecture, and using green space to help protect the environment should be considered.

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Green Libraries: Concept and Requirements

Green libraries minimize the negative impact on the environment and maximize the quality of the indoor environment. These libraries also focus on services, activities, events, resource projects related to the environment, and demonstrating the social role and responsibility of libraries as leaders of sustainable development. The most important of these measures are determining the right place for the building, using natural materials and degradable products in the building, providing less harmful equipment, saving water, energy and materials (including paper) and recycling waste. The green library movement started the use of computer networks in a serious way. However, this movement also created problems. For example, high electricity consumption, excessive heat production, energy waste, pollution and increased pollutant levels. To solve the problem, librarians focused on the concept of green content. For example, accurate processing of information, refining of duplicate information, removal of redundant sources and standardization of information and content management were among the actions taken in this field. a green library includes various dimensions such as green building, green management, green human resource management, green information systems, green services and programs.

Green management means management for greater convergence of social, economic and environmental responsibilities. Today, the green approach is expanding in the world

Green Building: A green building is a building that is compatible with the environment and energy conservation, and from the idea to design, construction, operation, maintenance, repair and demolition, it complies with environmental considerations. Building a green building requires the mutual cooperation of the design team members (from the architect to the structural engineer and the mechanical and electrical facilities). The most important features of such a building are:

- Optimum use of energy, water and other resources;
- Protecting environmental health and improving resource efficiency; and
- Reducing environmental pollution and destruction.
- According to the definition of different dimensions of green building, the motivations of countries towards green building are as follows:
- Cost savings including 30 percent reduction in energy costs and 25 percent carbon savings;
- 30 to 50 percent saving in water use;
- 50 to 90 percent reduction in waste;
- Increasing market demand for green buildings;
- Paying lower insurance premiums;
- More durability of green buildings;
- The final cost of the building is low despite the high initial costs; and
- Use of renewable energy sources that have the ability to return to nature.

Green Management: Green management means management for greater convergence of social, economic and environmental responsibilities. Today, the green approach is expanding in the world. Due to air pollution, climate change, deforestation, etc., green management has come to the aid of problems and tries to help the greening of factories, companies, etc. by creating standards and regulations. Green management can be defined in three parts: green building, green energy and green waste.

Green Human Resource Management: Green human resource management refers to activities that include the development, implementation and continuous maintenance of a system that leads to the greening of the organization's employees. Human resource management turns normal employees into

green employees, so that they can achieve the organization's environmental goals and make a significant contribution to preserving the environment. The goal of green human resources management is to create, strengthen and maintain the insight created in the employees of the organization so that they have the greatest contribution in each of the roles of protecting the environment, supporting the preservation of natural resources, not polluting the environment, and creating the environment.

Green Information Systems: The goal of green information systems is to conserve energy and make optimal use of all information technology tools and services such as servers, software, communication services, and supplying their consumed electricity. Experts have presented green information systems as a technical way to support environmentally friendly business goals.

Green Services and Programs: The green library movement has pressured librarians to provide new services, and librarians are trying to provide new and clean services with their creativity. Green services and programs aim to expand the awareness of communities by providing resources and information about green living and environmental issues, organizing educational programs and workshops in achieving green spaces. In fact, green services consist of reducing the consumption of energy, raw materials, water, as well as minimizing pollution and waste, and maintaining and restoring the quality of the environment, which will ultimately lead to the modification of the consumption pattern and the modification of the environmental behavior of the society.

In general, green libraries can help the environment by having a green building. Due to the impact they can have on the environment, buildings are one of the most important elements of human life, which help to improve the state of nature by aligning with environmental standards. Therefore, green libraries, as one of the social institutions that have an environmental approach, have considered moving towards green buildings as one of their goals. Considering the different dimensions of green libraries, features that benefit the environment and provide benefits to the world by creating a healthier environment are highlighted.

Steps for Transforming Uzbekistan Traditional Libraries into Green and Socially Collaborative Agents

One: Providing Optimal Usage Patterns in Libraries

The first step is to collect the necessary information about the consumption of different resources such as water, electricity, fuel and energy in general in the library. The methods of implementing appropriate actions in the field of optimizing water consumption and necessary actions in the field of reducing consumption are:

- Replacing smart valves instead of regular valves;
- Periodic visits of water equipment in order to control water wastage;
- Reducing the irrigation of plants in the area by planting plants for dry areas that are compatible with any environment and require little water;
- Due to the fact that it is usually not possible to control precipitation and atmospheric precipitation, a rainwater collection tank can be built from the plates in the вацемент and the collected water can be used for non-drinking purposes such as toilets, irrigation, and cooling towers. Also, the water overflow of this tank can be directed directly to the built-in path for the flood to pass near the library building and reduce the negative effects of surface water wastage; and
- Using intelligent irrigation systems.

The methods of carrying out appropriate actions in the field of optimizing electricity consumption are:

- Conducting an audit every few years in the library building
- Installing a separate key for each part of the library to turn off and on the lamp;
- Replacing low consumption lamps instead of high consumption lamps;
- Using suitable electrical equipment (such as substituting suitable equipment instead of high-consumption electric kettles);
- Turning off heating and cooling devices outside office hours; and
- Installation of equipment to use solar energy.

Due to the importance of the role of daylight in human health and comfort, as well as the maximum time the building is used during the day, the following measures can be taken to make optimal use of daylight:

- For some parts of the library, especially reading rooms and book preparation workplaces, place them in the direction of natural light;
- Using light reflecting panels under the window which increases light penetration inside;
- Using the right color for the walls as well as for the shelves and library equipment is also very effective in absorbing natural light;

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• Using glass facades and lights built into the ceiling, which maximizes the use of natural light; and

• Using large windows and glass facades, as well as the bright color of the ceiling in order to use natural daylight to illuminate the library space.

The methods of carrying out appropriate measures in the field of optimizing energy consumption are:

• Using the lighting system with motion sensors and adjusting this system with the presence of people in certain places of the library (places with less traffic and there is no need to use the lighting system all the time.);

• Installing the spring on the doors that open to the open space;

• Using thermal insulation in the library;

• Using waste water for energy production;

• Using large windows to absorb natural sunlight;

• Using refrigerators with a energy label;

• Conducting periodic visits to facilities and insulating them in order to prevent energy wastage;

• Using door and window seals;

• Using automatic entrance doors; and

• Using a water feature in the library to cool the library environment in the hot seasons of the year.

Two: New Ways to Save Water, Electricity and Gas Resources

• Paying attention to increasing the energy efficiency of tasks such as turning off or putting computers, printers and copiers to sleep at the end of each working day;

• Updating the cleaning system of each floor with the lowest amount of water and energy consumption; and

• Substituting new and more energy-efficient computers instead of old, high-consumption computers.

Three: Designing the Inside or Outside of the Library with Vegetation

• When we talk about a green library, we unconsciously think of a library with green vegetation. The following suggestions are noteworthy:

• Using natural flowers in the library environment as well as local landscaping using plants suitable for the climate of each region;

• Creating green spaces in open spaces;

• Creating a green roof suitable for the climate of libraries;

• Creating green walls in the library by using plants that are resistant to plant pests (even if we have to use non-resistant plants, we can use creeping plants such as hair trees in the outside of the library, which remain beautiful even when they have no leaves.); and

• Library activities are important on tree planting day. Librarians along with library members, especially children and teenagers, can plant saplings in the yard or garden in front of the library or in a place near the library. Also, librarians can plant flower cuttings in pots with the help of children and the children can take them home and take care of them, nurture them and finally return them to the library on next year's tree planting day. This work makes the members of the library, especially children and teenagers, to contribute to the beautification of the library space.

Four: Managing the Recycling of Consumable and Unusable Waste

Before actions are taken in the field of recycling management, it is necessary to first obtain information about the production and how to deal with solid waste materials, so that according to this information, corrections can be made or suggestions can be made. Methods of implementing appropriate measures to manage the recycling of consumable and non-consumable waste are as follows:

• Using recyclable materials and materials in the library;

• Using materials suitable for the climate;

• Using local materials in the library;

• Using a machine to wash and clean old cloths and napkins instead of throwing them away;

• Reuse of existing materials in the current library building including sink, mirror, toilet accessories, rigid insulation, floor brick, cabinet, guard room, electrical panels, security equipment, flooring and carpets, fence, door, door hinge, fire extinguisher, Water cooler, home appliances and kitchen equipment;

• Using old wooden shelves and turning them into wood chips for different purposes;

• Recycle the false wall as soil;

• Using gypsum panels instead of glass wool insulation;

• Using prefabricated panels as filler;

• Using porcelain and glass bottles in programs and meetings held for library staff (instead of plastic and disposable containers);

• Using waste separation bins (creativity can be used in preparing these bins to encourage both library users and library employees to separate waste. For example, the bins can be made from recyclable waste as much as possible);

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- Obliging employees to separate waste;
- Requiring the officials of the waterworks to supervise the separation of waste;
- Using Paper less system in libraries;
- Maximum use of two pages of paper to do things;
- Using computer memory instead of paper;
- Installing and using a whiteboard in the meeting room;
- Preparation of two copies of theses; and
- Non-paper publication of popular works.

Five: Raising Awareness about the Social Responsibility of Libraries and Implementing Educational Courses Related to the Environment, Renewable Energy, and Waste Recycling.

There are more criteria for libraries to meet the ideas and ideals of a sustainable environment. In addition to having a green and environmentally friendly building, libraries can also act as educators and guides among environmentally friendly management offices, environmentally friendly user services, exemplary environmentally friendly activities, and providing information and training courses and environmentally friendly lifestyles. The methods of implementing appropriate measures to reduce harmful environmental effects are:

- Creating green collections by creating open discussion forums for groups interested in green books;
- Facilitating the use of environmental videos and showing or running lecture programs (videos of green libraries that have been successful in the country or even abroad can be prepared and exposed to the contract. So as to motivate library staff and members);
- Creating opportunities for children and teenagers in order to make them interested in environmental issues, such as holding poster and writing poetry competitions;
- Linking the library website to environmental sites as well as the website of green libraries in Iran and outside Iran;
- Communicating with local groups interested in environmental issues and understanding their information needs;
- Collecting environmental resources as well as sustainable development documents in order to attract the attention of library users to the concepts of sustainable development;
- Establishing a green station in the library - creativity can be used in this station. For example: setting up book exhibitions in the field of environment, presenting slogans related to sustainable development, preparing brochures and installing posters related to the environment, as well as setting up a suggestion box for library users in the field of presenting green ideas for having a green library;
- Installing posters and showing films, as well as holding a workshop by the head of the city's natural resources organization and identifying people interested in cleaning up nature;
- Preparation of nature assistant card for the participants in the workshops;
- Using environmental notice boards;
- Implementation and training of administrative rules and regulations in the field of environment;
- Organizing book reading meetings in the library and in schools with the topic of environment;
- Planning environmental trips;
- Informing and increasing the awareness level of the library staff by preparing and presenting various brochures about the green library and providing educational books to the staff; and
- Carrying out research projects in the field of green library.

Professional Actions: Suggestions to Uzbekistan Librarians for a Successful Transformation

Uzbekistan librarians can consider the following suggestions. These suggestions can gradually change people's attitude towards the importance of environment and nature and make them committed and responsible people:

- Make environmental protection one of the most important areas of your attention and action in your professional, social and family life;
- Study about environmental protection and its challenges and solutions in order to increase your general and specialized awareness in this field;
- Turn your library into one of the green and effective institutions in sustainable development by complying with the guidelines of organizations related to environmental protection (for example, The World Commission on Environment and Development);
- Encourage the community of library users to become a member and dynamic in associations and institutions related to environmental protection;
- Cooperate and brainstorm with relevant organizations in the field of appropriate water consumption patterns in your district and city, and participate in their meetings as much as possible;
- Cooperate with Non-Governmental ▶

In addition to having a green and environmentally friendly building, libraries can also act as educators and guides among environmentally friendly management offices, environmentally friendly user services, exemplary environmentally friendly activities, and providing information and training courses and environmentally friendly lifestyles

Organizations (NGOs) to implement various programs, including cleaning the environment, developing the use of organic foods and products, etc.;

• Attend kindergartens, elementary schools, high schools, and universities and cooperate with them in building culture and providing practical guidelines to preserve the environment;

• Try to introduce and describe scientific and public resources related to the culture of environmental protection that are available in the library or bookstores or on the Internet;

• Participate in social events and activities related to environmental protection and, if possible, introduce suitable services such as introducing reliable sources on this issue;

• Support the best organizations, individuals, publishers, works related to the environment (books, films, animations, research projects, posters, etc.) and environmentalists;

• Promote the culture of arboriculture on special days and occasions;

• Institutionalize the primary process of dry and wet waste separation in libraries, workplaces, and residences;

• Arrange symbolic programs for collecting garbage from nature;

• Raise awareness about the value and necessity of wildlife conservation among public and community-oriented services of the association and library; and

• In general, behave in such a way as to be a symbol of environmental culture. You should always try to keep the sky and the earth clean and promote this importance at the community level.

References:

1. Afacan, Y. (2017). Sustainable Library Buildings: Green Design Needs and Interior Architecture Students' Ideas for Special Collection Rooms. Journal of Academic Librarianship, 43 (5), 375-383.

2. Ambrozic, K., and Barnes, L. L. (2012). Green Buildings as Sustainability Education Tools. Library Hi Tech, 30 (3), 397-407.

3. Binks, L., Braithwaite, E., Hogarth, L., Logan, A., and Wilson, S. (2014). Tomorrow's Green Public Library. The Australian Library Journal, 63 (4), 301-312.

4. Cardoso, N. B. (2015). Sustainable and Green Libraries in Brazil: Guidelines for Local Governments. Presented at IFLA World Library and Information Congress and 1st IFLA General Conference and Assembly. Retrieved September 28, 2024 from https://library.ifla.org/id/eprint/1207/1/095-cardoso-en.pdf

5. Fourie, I. (2012). A Call for Libraries to go Green: An Information Behavior Perspective to Draw Interest from Twenty-first Century Librarians. Library Hi Tech, 30 (3), 428-435.

6. Ghorbani, M. (2018). Designing a Green Library Evaluation Checklist. Presented at: IFLA WLIC 2015. Retrieved September 28, 2024 from https://www.netzwerk-gruene-bibliothek.de/wp-content/uploads/pdf/Ghorbani_2018.pdf

7. Guo, J., Chen, Z. J., and Tao, Z. (2013). To Build a Green University Library-Architectural Design of Hefei Institute Library. In Applied Mechanics and Materials (Vol. 368, pp. 150-155). Trans Tech Publications Ltd. September 28, 2024 http://www.scientific.net/AMM.368-370.150

8. Hauke, P. (2015). How to Become/ How to identify a Green Library? Standards for Certification? Presented at IFLA World Library and Information Congress 81st IFLA General Conference and Assembly. Retrieve September 28, 2024 from https://library.ifla.org/id/eprint/1237/

9. Jones, L., and Wong, W. (2016). More than Just a Green Building: Developing Green Strategies at the Chinese University of Hong Kong Library. Library Management, 37 (6&7), 373-384.

10. Peterson, R. A., von Isenburg, M., Dietsch, B., and Lucas, D. (2014). Going Green: One Library's Journey toward Sustainability. Journal of Hospital Librarianship, 14 (1), 14-23.

11. Qutab, S., Faruqui Ali, Z., and Shafi Ullah, F. (2016). Environmentally Sustainable Library Buildings: Opportunities and Challenges for Asian Countries. Presented at IFLA WLIC 2016. Retrieved September 28, 2024 from https://library.ifla.org/id/eprint/1432/

12. Stark, M. R. (2011). Information in Place: Integrating Sustainability into Information Literacy Instruction. Electronic Green Journal, 1 (32), 1-16.

13. Tseng, S. H. (2008). Green Library Design and Evaluation: The Taipei Public Library, Taiwan. New Library World, 109 (7/8), 321-336.

14. Xu, H. (2016). Using Library and Information Technologies and Resources to Support Sustainability Projects Presented at: IFLA WLIC 2016. Retrieved September 28, 2024 from https://library.ifla.org/id/eprint/1339/