Sustainable Development as a Goal: Special Reference to Green Library

Dipanwita Sarkar

Librarian, Maheshtala College, University of Calcutta

dipanwita.4444@gmail.com

ABSTRACT

This paper highlights the green library concept. Green libraries are environmentally aware and eco friendly libraries and the aim of the Green Library is to draw attention, environment sustainability at all levels in the library. Green library also engage community people in environmental issues. This paper shows how social sustainability and environmental awareness can be spread by the Green Library movement. This paper is aware of IFLA United nations 17 sustainable development goals and its implications to the society. This paper is devoting to search the way how libraries and librarians can inspire their community in to more environmental sustainable way of action. As far environment is concerned our main aim is to reduce energy consumption and enhance the utilisation of renewable energy resources so that sustainability at all levels must be maintained and we shall gift our future generation a better eco friendly environment.

1. INTRODUCTION

The libraries at a time were dull places, gloomy rooms with books stacked on metal shelves branded with cryptic numbers plucked out of the Dewey Decimal system.

But today's libraries are very much different. Hard copy is also in the stacks and there is need for printed document still, but connectivity is playing now an important role. Connectivity means connecting to the community, connecting to the society. Vast archive of knowledge stored electronically around the world and in the true sense of the words, now library plays a vital role in the learning process of a community. Technology has played a tremendous role in the libraries and in the information industry. Today we can access a piece of information with in a fraction of time. In that situation there is a growing movement to create libraries that not only provide access to information, but also 'communicate a green identity' through both design and operations.

The idea has developed, where there is a growing commitment to establish sustainable Campuses. Academic libraries are : at the heart of the learning and research activities that drive the academic community and the

society also. Provides super fine information to the academicians and society. libraries are : at the heart of the learning and research activities that drive the academic community and the society also. Provides super fine information to the academicians and society.

Now we discuss what is green library.
According to IFLA guideline – *Green libraries* are environmentally aware and friendly libraries and their aim is to draw attention to environmental sustainability.

Green library buildings follow the LEED criteria as far as possible but are also committed to sustainable routines like recycling and decreasing consumption.

Green librarianship consists in green information services, i.e., offering open and easy access to reliable and updated environmental information. Green librarians promote the familiarity and use of this information in their communities as well as the community engagements in environmental issues. "Libraries are responsible actors advocating globally accepted library values, like literacy, equality, and open access to information, but also IFLA's global vision and UN's sustainable development goals in their communities."

SUSTAINABILITY

The term "sustainability" was introduced as an international issue by the book "The World Conservation Strategy" in 1980 (IUCN et al., 1980). Since that date, the term begins to be used with increased frequency and its economic, social and environmental aspects were argued as well as its significant value in the search for a new form of development.

This concept was deeply discussed in a study prepared for the World Commission on the Environment of the United Nations known as the "Brundtl and Report" (World Commission on the Environment and Development, 1987). This report, among different things, concludes that it is very important to make a large change in the concept and approach towards human development

Definitions of Sustainability
There may be different definitions of sustainability and sustainable development
All the definitions have same meaning and approach as:
•   Living with limitation
•   Understanding the inter-relations among economy, society, and environment
• Equitable distribution of resources and opportunities (sustainable measure)
"***Sustainability is the capacity to improve the quality of human life while living within the carrying capacity of the Earth supporting eco-systems***." This definition has been provided by the International Union for Conservation of Nature (IUCN).

The original definition of sustainable development is usually considered to be:
 "***Development that meets the needs of thepresent without compromising the ability of future generations to meet their own needs.***"

THE OBJECTIVE OF GREEN LIBRARIES
 Green libraries promote the familiarity
1)   Use of information in their communities as well as the community engagements in environmental issues.

2)   Reduce consumption cost.

3)   Design to minimise negative impact on the natural environment.

4)   Maximise indoor environmental quality by means of careful site selection, by use of natural construction material.

5)   Conservation of resources.

6)   Recycling of waste materials.

Libraries are responsible in spreading literacy, equality, and open access to information and Also spread IFLA's global vision and UN's sustainable development goals in their communities.

Now we discuss what is ENSULIB, a new term coined by IFLA :

IFLA Headquarters has accepted ENSULIB's name change. It is now officially called Environment, Sustainability and Libraries – that is, ENSULIB.

The name change is due to broadening the scope, to include not only "greening" of Library buildings but also considers the wider impacts of climate change on library practices, collections, policies, financing, services, management and professional development alongside sustainable development, programming, and education for the communities which a library serves.

ENSULIB's aim is to adhere and develop further the green library movement, which has so far emphasized the green library buildings and green routines, like recycling and sorting waste.

ENSULIB wishes to create a concept of green librarianship, which would take account Greening formation and library services as well as social engagement at the age of disinformation, alternative facts and restricted information skills and literacy.

ENSULIB wishes to encourage librarians to inspire their communities into more environmentally sustainable way of action by providing materials on green librarianship, giving voice to green librarians and library projects worldwide and offering a discussion forum. An integral part of this work is the annually presented IFLA Green Library Award.

GOALS

Effects of climate change on libraries (modification of the conditions of storage and preservation, buildings insulation, impacts on library finances and management).

Applications of environment-friendly practices in libraries (recovery of rainwater, use of renewable energy sources, printing control, paper recycling, etc).

Proposed environmental recommendations for the profession (recycling of outdated documents, use of biodegradable materials, etc).

Increasing and promoting sustainability-related library resources and services (development of collections on environmental themes, exhibitions, outreach, etc.)

Increasing librarians' own awareness of environmental concerns. Now the next topic of discussion is sustainable development as a goal.

The **Sustainable Development Goals** (SDGs), also known as the Global **Goals**, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

The Goals are -

- Goal 1: No Poverty.
- Goal 2: Zero Hunger.
- Goal 3: Good Health and Well-being.
- Goal 4: Quality Education.
- Goal 5: Gender Equality.
- Goal 6: Clean Water and Sanitation.
- Goal 7: Affordable and Clean Energy.
- Goal 8: Decent Work and Economic Growth.
- Goal 9 : Industry infrastructure
- Goal 10:Reduced inequalities
- Goal 11:Sustainable cities and communities
- Goal 12:Responsible consumption and production
- Goal 13: Climate action
- Goal 14: Life below water
- Goal 15: Life on land
- Goal 16: Peace, justice and institutions
- Goal17: Partnership for the goals

Sustainable development can be thought of in terms of three spheres, dimensions, domains or pillars, i.e. the environment, the economy and society. The three-sphere framework was initially proposed by the economist Rene Passet in 1979. It has also been worded as "economic, environmental and social" or "ecology, economy and equity". This has been expanded by some authors to include a fourth pillar of culture, institutions or governance, or alternatively reconfigured as four domains of the social - ecology, economics, politics and culture, thus bringing economics back inside the social, and treating ecology as the intersection of the social and the natural.

SUSTAINABLE COMMUNITY

Sustainable communities must have effective, efficient, reliable, economic, and equitable access to critical data and information. Yet many community members do not have adequate access to primary data and information resources, nor do they have the expertise to understand and use these primary resources effectively in the decision making process.

They need similar access to the data and information tools to analyze, evaluate, and manage these resources. Communities also need access to institutional and human reservoirs of expertise and knowledge to assist them in the use of data and information for the decision- making process.

A brief set of recommendations describing how libraries and librarians can better serve their communities for improving the generation and application of science to sustainable development.

Inclusion of the role of libraries in this national meeting and in the documentation presented at the WSSD was fostered by two factors. The first is that libraries and library networks have established a historic public trust as stewards of information and providers of resources, services, and products to assist communities in the sharing and use of that information.

The second factor for the inclusion of "Libraries" among the myriad of recommendations to the WSSD was based on organizational and individual efforts in creating and implementing the Libraries Build Sustainable Com munities initiative by the American Library Association and Global. If we go into historic period we find The American Library Association (ALA), in conjunction with Global Learning of New Jersey, received a grant from the U.S. Agency for International Development providing $300,000 for a two-year project beginning in 1999.

This project, Libraries Build Sustainable Communities (LBSC), was designed to help librarians learn about the concepts and issues that related to the term "sustain ability," and more important, to show how libraries and librarians in all settings serve as strategic assets and resources for building sustainable communities while achieving positive development, environmental integrity, and equitable access.

This United Nations World Summit on Sustainable Development (WSSD, dubbed "Rio +10") was to have been devoted to the implementation of actions for fostering sustainable development on large scales. It was felt that discussions on sustainability were achieved at the 1992 Earth Summit in Rio de Janeiro and the subsequent Decade of Dialogues served as focal points for implementation. Hopes were high as countries began their preparations for Johannesburg, and the leaders of the world's nations planned to gather to focus on global aspects of issues related to water, energy, food, and health. Again the gathering would focus on the vast difference between the developed nations and the under developed nations.

Perhaps the recommendation from the National Council for Science and the Environment 2001 National Conference can assist the process. The following recommendations about the roles libraries can play in this effort were made in the NCSE documentation presented at the 2002 WSSD in Johannesburg: Partnerships: Librarians and information providers are actively engaged in linking information sources and information consumers. Librarians should be valued as natural partners in planning and implementing sustainability initiatives and actions at local, national, and international levels. Information Exchange: Librarians and information providers should actively promote the exchange of useful scientific data and engage members of local communities in decision making. Awareness: Libraries and librarians should be encouraged and empowered to foster environments of learning and awareness. Libraries and librarians use, promote the use of, and increase the awareness of data and information sources and resources for the com munities they serve. Libraries and librarians also use, promote the use of, and increase the awareness of the appropriate information and data technologies and tools for members of the communities for their evaluation, integration and synthesis in decision-making across disciplines and perspectives.

So we come to that point that we have to move for Green Library.
Why we need this movement.

The nature and number of Library users also changed from offline mode to online mode.

That time, libraries were eco-friendly with printed documents and other reading materials but there were constraints of place in the development of libraries due to increasing research activities and publishing, that problem was solved by the use of electronic gadgets in the libraries. As every new advent has advantage and disadvantage, so this digitization too has an adverse effect on the environment due to the uses of imperishable electronic gadgets in the process of digitization that poses a hazardous impact on the environment.

Sustainable development of the digitized libraries is a necessity for the betterment of the environment.

At present, every government and non- government organizations, industries, institutions etc. are an endeavour for this problem. Libraries have also incorporated green practices to protect the environment through their green library initiatives. The need for greener services to the environment is also growing and becoming essential day by day. These greener services are found in printing and copying. Libraries can lead to eco-friendly or environmental sustainability practice, re-using and recycling of materials, reducing waste and toxic products and developing alternative technologies.

Environmental Sustainability plays a big issue. We all should think about minimisation of e-waste, aximises the use of waste materials, enhances the use of green products Environment.

An important contribution to the concept of environmental sustainability was made by the OECD

Environmental Strategy.

For the First Decade of the 21st Century (OECD, 2001). The Strategy defines four specific criteria for environmental sustainability :-
Regeneration (renewable resources shall be used efficiently and their use shall not be permitted
Substitutability (non-renewable resources shall be used efficiently).
Aassimilation (releases of hazardous or polluting substances into the environment shall not exceed their assimilative capacity) and Avoiding irreversibility.

Policies in the context of sustainable development:

• Maintaining the integrity of ecosystems through the efficient management of natural resources

• De-coupling environmental pressures from economic growth

• Improving information for decision-making: measuring progress through indicators

• The social and environmental interface: enhancing quality of life

• Global environmental interdependence: improving governance and co-operation.

So we concentrate how we can create a green library for the betterment of the environment as well as society.

GREEN PRINTING

With the advancement of technology still there is increasing use of printed papers. Paper consumption globally growing rapidly. In the modern age of technology with e-mail, Digital and

Electronic archive, internet, printed paper is needed everywhere. Paper use has reached 400 tons of paper per year.
Green printing has many benefits. Green printing saves printing cost depending on the eco-friendly strategies applied. Production of paper uses large number of natural resources such as trees, water, and energy. The printing process also involves inks, solvents, acids, lacquers, dyes, varnishes etc. These can be hazardous both human and the environment. Several strategies may be taken to reduce paper use, ink use and other resources.
1) Recycling of used papers.
2) Conservation of natural resources as every ton of recycled papers saves 17 trees.
3) Protection and conservation of clean air : manufacturing of 1 ton paper from virgin wood pulp creates an additional air pollution.

Reduce the use of Ink.

Ink printers and their Inks are made up of several ingredients and the chemicals use in these inks are mostly dangerous to the environment. Manufacturing of a toner emits carbon-di-oxide to the environment. Even throwing of old toner cartridge in the garbage or in the soil creates soil pollution.

Soy ink is more sustainable than petroleum –based ink. Enhancement of recycling and remanufacturing of toner cartridges is a good sustainable strategy. So we must reduce paper consumption, we should understand the need of recycling paper. Several other strategies should be taken to reduce carbon footprint in the library like:

1. We should use environment friendly materials.

2. We should practice energy saving option.

3. Reduce waste and proper arrangement of waste materials.

4. Increase in using recycled products.

5. Reduce cost of energy used in the library and maintaining green environment

6. Effective use of natural resources.

CONCLUSION

The above discussion mainly highlights the social responsibility of a library as they are the most important source of knowledge to the society. Environment pollution has reached an alarming situation from where everyone in this society should rethink about sustainable development. All people must sustain in the environment and we are the most responsible for creating the environment pollute and we the most relevant creature in this world should retain our environment in a sustainable manner. We all know about renewable energy sources. Environmental sustainability is an urgent need for all at present. To become as sustainable libraries can play an important role by performing green practices. This should be done not because of saving money but also to save our lovely planet.

Libraries and Librarians can do this as they are considered as the resource hub of a society and by the green library movement consciousness towards environment should be increased. Green printing, eco-friendly ink for printing, reduction of paper usage all moves towards sustainable development. As information specialist , librarians should be aware of what environmental labelling really means and be a resource for their user communities for such information. In this way slowly but positively we shall move for an environmental sustainable society and we must keep in mind what we are doing will affect our future generation, if we make our earth a beautiful one rather we try to do so, it will be beneficial for our next generation. Green library is a very good concept towards sustainable development of environment.

REFERENCES

[1] Bedˇrich Moldan, S. J. (2012). How to understand and measure environmental sustainability: Indicators and targets. Ecological Indicators,17, 4-13.

[2] "Bush Turns His Back on World Summit/ Environment News Service, Aug. 19, 2002; "Republicans Pressure Bush to Snub World Summit/ Environment News Service, Aug. 16, 2002.

[3] Daly, H. (1990). Toward some operational principles of sustainable development. Ecological Economics, 2, 1-6.

[4]Goodland, R. (1995). The concept of environmental sustainability. Annual Review of Ecology and Systematics, 26, 1-24.

[5] Hauke, P., & Schubert, S. (2013). Designing the Green Library: environmental sustainability in Library space, Library management, and Library service. BOBCATSSS. Ankara: Turkey.

[6] Jeffrey L. Brown, "Libraries Build Sustainable Communities: A Partnership of the American Library Association and Global Learning, Inc. Final Report Submitted to Susan Saragi, Development Education Program, United States Agency for International Development" (Jan. 31, 2019).

[7] Kathleen de la Pena McCook, A Place at the Table: Participating in Community Building (Chicago: ALA, 2000).

[8] Kruse, T. (2002). Recycling opportunities: laser printer cartridges. Green Library Journal, 45-61.

[9] Kruse, Ted (2011). Greener library printing and copying. The Bottom Line, 24(3), 192-196. Available at: http://dx.doi.org/10.1108/08880451111186053. Assessed on 26 February 2019.

[10] Libraries Build Sustainable Communities. Accessed June 25, 2020 www.ala.org/sustainablecommunities.

[11] OECD. (2001). OECD Environmental Strategy for the First Decade of the 21st Century. Paris: OECD.

[12] Public Library Association. Public Libraries Build Sustainable Com munities (Special Issue) Public Libraries 40 (Jan./Feb. 2001).

[13] Reference (UCN et al., 1980) IUCN, UNEP, WWF. The World Conservation Strategy WWF, Gland, Switzerland (1980)

[14] Serageldin, I., & Streeter, A. (1993). Valuing the environment: proceedings of the First Annual Conference on Environmentally Sustainable Development. Environmentally Sustainable Development (p. Series No. 2). Washington, D.C.: The World Bank.

[15] Stoss, Fredrick w., (2003). Sustainable communities and the roles ibraries and Librarians Play, Reference and User services Quarterly, 42(3),pp 206-210. Https://www.jstore.org/stable/20864011. Accessed on January 2020.

[16] World Commission on Environment and Development (1987). Our common future. Oxford: Oxford University Press. Retrieved 17 June 2019 from http://www.un-documents.net/wced-ocf.htm.

[17] World Commission on Environment and Development, Our Common Future (Bruntland Report) (Oxford, England: Oxford University Pr., 1987).

[18] United Nations Environment Programme. Agenda 24. Accessed Dec. 16, 2019.

[19] Web resources
http://www.slideplayer.com/slide/4767874/
https://www.vanderbilt.edu/sustainvu/what-we-do/printing/
https://en.wikipedia.org/wiki/Green_printing
http://gogreenplus.org/nuts-and-bolts-guide/planet-nuts-and-bolts-guide/waste-reduction-
responsibledisposal/environmentally-friendly-printing/   http://scs-india.com/solutions/green-printing/
http://www.broward.org/LIBRARY/MYLIBRARYONLINE/Pages/MyLibraryOnline.aspx
http://www.theenergycollective.com/bobbyg/2401395/ink-waste-environmental-impact-printer-cartridges
http://www.sustainabledevelopment.un.org. (accessed on 10-01-2020)
www.soygrowers.com/resources (accessed on June 2020).
www.unep.org. (accessed on June 2020).

_____