SOCIAL AND CULTURAL METRICS FOR ASSESSING LIBRARY SUSTAINABILITY PRACTICES IN AKWA IBOM STATE

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Abstract

Studies on sustainability have been gaining interest within the educational communities. However, studies related to sustainability in library preservation and conservation, especially in academic libraries, are still limited. This study aimed to determine current practices in social and cultural library sustainability metrics for academic libraries. Descriptive survey research was employed for the study. The population consisted of 238 respondents, comprising librarians from the public libraries in Akwa Ibom State and sustainability experts from the University of Uyo, Akwa Ibom State. The sample size is 118 respondents, arrived at using Krejcie and Morgan finite table of sampling. Simple random sampling was used to select the respondents for the study. The researchers' developed instrument titled "Library Sustainability Parameters Questionnaire" was used to collect data for the study. The instrument developed by the researchers was face validated by three experts in the Faculty of Vocational Education, Library and Information Sciences, University of Uyo, Akwa Ibom State. The instrument was subjected to inter-rater reliability test to determine the reliability. The instrument was trial tested on 30 respondents. The scores obtained from the trial-test were subjected to Cronbach alpha reliability test. The result showed a reliability co-efficient of 0.81. On the basis of the high reliability index, the instrument was deemed suitable to be used in conducting the study. Data for the study was collected using questionnaires administered in the sampled schools. The instrument was first presented to experts, who identified the social and cultural sustainability. The instrument was also presented to librarians to rate the extent to which they practice the identified social and cultural sustainability metrics. Mean and standard deviation to answer the research questions. The findings of this study will serve as a starting point to obtaining a comprehensive understanding of how academic libraries are measuring sustainability programs. The findings revealed a low level of integration of social and cultural sustainability into library sustainability practices in Akwa Ibom State. The study recommends that libraries should develop a sustainability framework that integrates social, environmental, economic and cultural dimensions to its overall strategies.

Keywords: *Social sustainability, cultural sustainability, library sustainability practices, green libraries, sustainable development*

Background of the Study

Academic libraries are a core piece of our social infrastructure, fostering community engagement and social services, and that means they naturally contribute to the people-focused sustainable development goals (SDG). Often providing free resources, public libraries are true advocates of SDG 1: No poverty (Fairbotham, 2021). However, the focus has shifted to building sustainability into library services. Beyond their operating model, libraries have a number of other opportunities for the research and development of environmentally sustainable practices. Gaspar and Ochôa (2018) identified three main approaches to library sustainability integration. These includes, library greening, addition of cultural dimension to the social, environmental and economic dimensions of sustainability as a fourth pillar of sustainability as well as enhancing libraries‘ contribution to global (sustainable) development goals.

In what specifically establishes the intersection of academic libraries with evaluation and sustainability, analysis by Gaspar and Ochôa (2018) showed that the development of a quality management framework for library sustainability is essential for measuring progress against sustainability standards. Quality management provides a powerful framework for effective services in the library. Libraries are service organizations whose service quality has important role in development and distribution of knowledge as well as fostering sustainability. They are service organizations dedicated to their customers and the patrons by formulating a strategic plan, and following it with a commitment to continuous quality improvement (Ramanjaneya, 2017). There are various methods, tools and techniques to measure, control and improve the quality of library services. However, with respect to sustainability, there are sustainability metrics that serve as benchmarks for the development of a quality framework for libraries. Gaspar and Ochôa (2018) developed an integrative conceptual model to measure sustainable development that includes four key dimensions of economic, social, environmental and cultural dimensions. Thus, a library quality management framework should incorporate these four dimensions in addition to other contextual and occupational components.

Libraries have been around for centuries, and so have their model for sharing access to resources. This approach is arguably one of the earliest recorded means for reducing and reusing materials. Libraries offer a sustainable alternative where the same people can share access to the same resource. In addition, a communal appreciation and respect for libraries ensures that patrons take good care of the books they do borrow, extending the lifetime of a given book. Given the sustainable model that operates at their core, it is no surprise that libraries are constantly finding new ways to replicate this system. The library sustainability quality management framework is an organization-wide initiative to install and make permanent a climate in which libraries continuously improve its ability to deliver high-quality products and services to satisfy their patrons (White, 2022).

The development of sustainability models and indicators for galleries, libraries, archives, and museums (GLAMs) offers the opportunity to address these issues. The employment of such measures can benefit GLAMs by providing a holistic method by which to view their operations and thereby overcome strategic planning issues. It can also provide justification for their continued financial support by demonstrating their contribution to the wider sustainable development goals of society (Jankowska & Marcum, 2010; Stylianou-Lambert, *et al*., 2014).

Statement of the Problem

Green information system offers opportunity to tackle economic as well as environmental issues while improving productivity, reducing costs, and enhancing benefits for libraries.

However, this organizational level win-win goal is not an easy task to implement. The lack of sustainability skills, knowledge and consciousness has resulted in many forms of waste, unused resources, energy inefficiency and pollution from businesses (Watson, *et al*, 2010). This is particularly the challenge with libraries with respect to integrating sustainability outside the traditional library practice of resource sharing. Libraries are failing to maximize the benefits of sustainable library services and there seems to be no framework for assessing and measuring library sustainability practices in Nigeria.

Objectives of the Study

The broad objective of this study is to determine the parameters for measuring library sustainability practices in Nigeria. Specifically, the study sought to

1. Determine the cultural sustainability parameters for assessing library sustainability practice in Nigeria.
2. Determine the social sustainability parameters for assessing library sustainability practice in Nigeria

Research Questions

1. What are the cultural sustainability dimensions for assessing library sustainability practice?
2. What are the social sustainability dimensions for assessing library sustainability practice?

Literature Review Sustainable Development

Sustainability is the process of living within the limits of available physical, natural and social resources in ways that allow the living systems in which humans are embedded to thrive in perpetuity (Mead, 2019). The concept of sustainability today encompasses all the processes and systems that support production in the short, medium and long terms, while also ensuring that future generation including the ecosystem is preserved. The goals of sustainable development include managing resources, reducing waste and saving the environment among others. The sustainability challenges are numerous, from climate change, energy and water supply, biodiversity and land use, chemicals, toxics and heavy metals, air pollution, waste management, ozone layer depletion, oceans and fisheries to deforestation (Esty & Winston, 2016). Addressing these challenges remains a complex task, requiring different units of society to fulfill certain specific obligations. For educational institutions, a shift to sustainable process demands the alignment of their objectives with sustainability goals (Cardoso & Carvalho, 2018). Each industry and business have responded differently but all targeted at meeting the same goals.

A new trend has also emerged where value relevance of sustainability is measured through the overall strategy of assessing the environmental, social and economic performance of organisations. This is sometimes referred to as the ‒triple bottom line‖, or the ‒three pillars‖ of sustainability, that is the state of creating a balance of social responsibility, environmental obligations with economic profitability (Molla, 2013). The triple bottom line is a business concept that posits firms should commit to measuring their social and environmental impact in addition to their financial performance rather than solely focusing on generating profit, or the standard ‒bottom line. Triple Bottom Line (TBL) is an emerging process that aims to report, assess and improve organisational performance in relation to sustainability. The extent to which sustainability considerations are integrated across a company‘s governance tools underlines its

ability to reflect them in business decisions.

Although, originally considered a component of social sustainability, it is now widely agreed that culture is of equal importance to economic, environmental and social concerns in enabling sustainable development (Hawkes, 2001). Culture can be referred to _intellectual and creative products‘, such as those which galleries, libraries, archives, and museums (GLAMs) work to conserve and produce (Canadian International Development Agency [CIDA], 2000). However, it can also be referred to _the shared ‒patterns of thought and behaviour, values, and beliefs‖‘ (Barthel-Bouchier, 2013: 11) of a society, being part of its _fabric‘ and shaping the way that _things are done and our understanding of why this should be so‘ (CIDA, 2000: 1). From this perspective, culture is not only integral to the existence of a society or social group in the first place but can also be seen to provide us with the means of _comprehending‘ and _implementing‘ the changes in our ideas about living that are required to enable a more sustainable society to be possible (Hawkes, 2001: 25).

Increasing acknowledgement of culture as the _fourth pillar‘ of sustainability (Hawkes, 2001) could enable better alignment between external sustainability goals and organisational missions. The protection of cultural heritage assets, as a core means by which cultural values and meanings are transferred between generations, is considered crucial for cultural sustainability to be possible (United Nations Educational Scientific and Cultural Organisation [UNESCO], 2013). In addition, since culture pertains to the _beliefs and practices‘ that shape the way that _things are done and our understanding of why this should be so‘ (CIDA, 2000), it can also provide a lens by which to comprehend and implement the changes necessary to enable sustainability to be possible (Hawkes, 2001:25).

Libraries provide a unique cultural and social space for their communities, with collections that can provide fascinating insights into their users‘ interests over the centuries and buildings that are often historic landmarks. As a core value of librarianship, sustainability is not an end point but a mindset, a lens through which operational and outreach decisions can be made. It extends beyond an awareness of the roles that libraries can play in educating and advocating for a sustainable future.

Green Libraries

Gupta (2020) defined, Green library or sustainable library as a library designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection, use of natural construction materials and biodegradable products, conservation of sources like water, energy, paper and responsible waste disposal recycling etc.‖ Green library also includes the use of green technologies, strategic planning, and adopting green practices, which contribute to sustainability, in libraries. Communities need libraries that can act as a role model for sustainability, by educating people on green topics and ideas, environment friendly building practices, and help them switch to renewable energy options. It is the right time for librarians to support the Green Library Movement (Antonelli, 2008).

Empirical reviews

Aytac (2019) investigated library environment sustainability progress index (LESPI): benchmarking libraries‘ progress towards sustainable development. The study developed a ‒Library Environment Sustainability Progress Index‖ (LESPI) which can be used as a benchmarking tool for any library to assess their compliance with the goals. In order to compile the Index, the 169 concrete targets were carefully examined and 46 of them selected for inclusion in the LESPI. The proposed measure has been pilot tested with a college library in New York.

This measure should be tested with another library, perhaps with a public library, to monitor the feasibility of the Index. Moreover, creating a ‒composite score‖ for three major components of the Triple Bottom Line (TBL) equation as well as for the Index in general would be beneficial to make more informative comparisons in the future with other libraries.

Rachman and Ratnasari (2022) determined current practices of sustainable library preservation and conservation in academic libraries. The findings of this study will serve as a starting point to obtaining a comprehensive understanding of how academic libraries are implementing climate change–responsible preservation and conservation programs. This study applies quantitative and descriptive approaches to collect data. A questionnaire was distributed to the top 200 universities in the Universitas Indonesia (UI) GreenMetric World University Rankings 2021. The results showed that current practices of sustainable library preservation and conservation implemented at the majority of academic libraries relate to sustainable energy use. Although some areas still need to be developed (e.g., policy and regulation toward sustainable library preservation and conservation practices, alternative eco-friendly preservation and conservation materials, and waste management practices), the fact that academic libraries have implemented sustainable practices in preservation and conservation is noted as a positive finding, since it represents success in universities‘ efforts to address the climate change issue.

Kamińska, *et al* (2022) investigated the landscapes of sustainability in the library and information science. The authors identified the key areas that affect libraries as socio-cultural and scientific institutions, in which work related to the sustainability concept is actively carried out. Mixed research method was employed for the study. Quantitative research allowed for determining the proportions of efforts made by scientists within the previously selected areas, and to outline trends observed within those areas. the findings of the study showed that libraries are integrating sustainability into their services. however, there is still much work to be done.

Methodology

This study employed the descriptive survey research design. The population is 238 respondents, comprising librarians from the academic libraries in Akwa Ibom State and sustainability experts from the University of Uyo, Akwa Ibom State. The sample size is 118 respondents, arrived at using Krejcie and Morgan finite table of sampling. Simple random sampling was used to select the respondents for the study. The researchers‘ developed instrument titled ‒Library Sustainability Parameters Questionnaire‖ was used to collect data for the study. The questionnaire was designed with a 4-point rating scale with options ranging from Strongly Agree (SA), Agree (A) Disagree (D) and Strongly Disagree (SD).

The instrument developed by the researchers was face validated by three experts in the Faculty of Vocational Education, Library and Information Sciences, University of Uyo, Akwa Ibom State. They assessed the instrument in terms of its appropriateness of material to the constructs under study. All corrections and inputs were built in to the final version of the instrument. The instrument was subjected to inter-rater reliability test to determine the reliability. The instrument was trial tested on 30 respondents. The scores obtained from the trial-test were subjected to Cronbach alpha reliability test. The result showed a reliability co-efficient of 0.81. On the basis of the high reliability index, the instrument was deemed suitable to be used in conducting the study.

Data for the study were collected using questionnaires administered in the sampled schools. The instrument was initially presented to experts, who identified the social and cultural sustainability. The instrument was also presented to librarians to rate the extent to which they practice the

identified social and cultural sustainability metrics. All ethical issues were addressed before commencement of testing. The data generated were analyzed using mean and standard deviation to answer the research questions.

Presentation of Findings

Research Question 1: What are the cultural sustainability dimensions for assessing library sustainability practice?

Table 1: Summary of Mean Statistics of Library Cultural Sustainability Practices

Library cultural sustainability practices	Do you agree to the following as cultural sustainability for libraries in Nigeria			To what extent do your library practice the following		
	Mean	Std. Dev.	Remark	Mean	Std. Dev.	Remark
Preserving the collection	3.59	0.59	*SA	2.83	1.26	**ME
Increasing community engagement	3.44	0.81	SA	2.45	1.29	ME
Promoting local culture	3.47	0.88	SA	2.04	1.32	ME
Promoting local authors	3.59	0.90	SA	2.25	1.41	ME
Promoting cultural diversity	3.55	0.86	SA	2.19	1.31	ME
Promoting Global Green Initiatives	3.50	0.78	SA	2.13	1.43	ME
Cumulative mean	3.52	0.80	SA	2.31	1.34	ME

***SA- Strongly Agree; **ME- Moderate Extent**

Table 1 gives the summary of the mean and standard deviation of the item analysis of library cultural sustainability practices. The result shows that the experts agreed that the identified items on social sustainability are indices for measuring library social sustainability. The result also shows that on the extent of practice, the result shows that all the items have moderate extent. This indicates that library social sustainability is practiced moderately among libraries in Akwa Ibom State.

Research Question 2: What are the social sustainability dimensions for assessing library sustainability practice?

Table 2: Summary of Mean Statistics of Library Social Sustainability Practices

Library social sustainability practices	Do you agree to the following as cultural sustainability for libraries in Nigeria			To what extent do your library practice the following		
	Mean	Std. Dev.	Remark	Mean	Std. Dev.	Remark
Make library collections digital	3.47	0.64	*SA	2.78	1.39	**ME
Digitalise library services	3.30	0.85	SA	1.90	1.27	ME
Recycle and reuse materials	3.34	1.05	SA	2.29	1.25	ME
Provide shared spaces, resources and facilities	3.44	1.05	SA	3.20	1.37	***GE
Social inclusion	3.48	0.89	SA	2.01	1.28	ME
Participation in information and education	3.54	0.78	SA	2.09	1.32	ME
Conducting customer Satisfaction Survey	3.76	0.62	SA	3.43	1.36	GE
Equal Opportunity/ Affirmative	3.76	0.68	SA	2.33	1.41	ME
Energy conservation techniques	3.89	0.49	SA	2.01	1.42	ME
Encouraging student Collaborations	3.60	0.94	SA	2.19	1.34	ME
Cumulative mean	3.56	0.80	SA	2.19	1.34	ME

***SA- Strongly Agree; **ME- Moderate Extent; ***GE- Great Extent**

Table 2 presents the mean of the item analysis for library social sustainability. The result indicates that the experts agreed on the listed library social sustainability parameters as essential social sustainability metrics for assesses sing library sustainability practices. The result however, indicates that librarians‘ responses shows a moderate extent of practice of social sustainability.

Discussion of Findings

Cultural Sustainability Dimensions and Library Sustainability Practice

The findings of the study identified cultural sustainability paradigms for assessing library sustainability practices. The result identifies preserving collections, patronage of local authors, promoting local culture, promoting cultural diversity and green solutions. The result also showed that there is a low level of practice and integration of cultural ethos with respect to sustainability practices among libraries in Akwa Ibom State. This finding is supported by Aytac (2019) who developed library environment sustainability progress index (LESPI). The result is similar to the same benchmark adopted by the study. This includes cultural sustainability practices of culture preservation and diversity promotion. This finding is also supported by Rachman and Ratnasari (2022) whose findings showed that although certain sustainability practices were adopted by libraries, a lot were still not practiced by libraries and librarians yet.

The findings from analysis also reveal a moderate extent of integration of social sustainability into library sustainability practices. While sustainability is often talked about, very little has been done to integrate into library practices. sustainability with respect to library practices is playing catch-up in Nigeria, with a widening gap that has implications for future library design and operations. This finding is in tandem with Kamińska, *et al*. (2022) who examined the landscapes of sustainability in the library and information science. The authors identified the key areas that affect libraries as socio-cultural and scientific institutions. The findings of the study showed that libraries are integrating sustainability into their services. However, there is still much work to be done.

Conclusion

The study ascertained the library sustainability parameters and the extent of practice in Akwa Ibom State. Based on the findings of the study, it is concluded that social and cultural sustainability is moderately practices by libraries in Akwa Ibom State. The outcome of the study reveals a low level of integration of sustainability into library sustainability framework by libraries in Akwa Ibom State.

Recommendations

The study recommends the following

1. Libraries should develop a sustainability framework that integrates social, environmental, economic and cultural dimensions to its overall strategies.
2. Libraries should set goals and timeframes for implementation of sustainability strategies.
3. The cultural sustainability paradigms must consider local and regional aspects of the culture of the people in its strategies.

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