

The Impact of Agricultural Libraries in Promoting Sustainable Development Goals: Insights from India

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ABSTRACT

Agricultural libraries play a pivotal role in achieving the Sustainable Development Goals (SDGs), particularly in agrarian nations like India. This study investigates their alignment with the SDGs in the Indian context by examining their roles, services, and the challenges they face. In a country where agriculture is a critical sector yet burdened with issues such as resource depletion and rural poverty, agricultural libraries serve as essential knowledge hubs. Through access to vital information, the dissemination of best practices, and the promotion of sustainable methods, these libraries support various stakeholders in addressing key agricultural challenges. Recognizing their value is essential for formulating effective policies that align with the SDGs. Given the intersection of agriculture with multiple goals, such as Zero Hunger, Responsible Consumption and Production, and Climate Action, libraries act as strategic partners in raising awareness and fostering meaningful change. By highlighting their transformative potential, this research emphasizes the importance of leveraging agricultural libraries to accelerate sustainable development. Ultimately, these libraries are not just repositories of information—they are dynamic agents of progress, guiding India toward a more sustainable and equitable future.

KEYWORDS: Agriculture libraries, Sustainable development goals (SDGs), Sustainable agriculture, Knowledge dissemination, India.

INTRODUCTION

The Sustainable Development Goals (SDGs) have garnered significant global attention as a comprehensive framework for addressing critical societal and environmental challenges. Established by the United Nations, these goals encompass a wide range of interconnected objectives aimed at fostering a more sustainable and equitable world by 2030 (United Nations, 2022). Within this framework, agricultural libraries play a vital role, particularly in countries like India, where agriculture is a cornerstone of the economy and livelihoods. This study seeks to explore

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the contribution of agricultural libraries to the advancement of SDGs in the Indian context. By understanding their role, it becomes possible to identify strategies that can maximize their impact and strengthen their position as catalysts for sustainable change. Furthermore, the research aims to highlight the specific challenges faced by agricultural libraries in India and to explore potential solutions and opportunities to overcome these barriers (Musa and Olawale, 2020).

India's agricultural sector is not only fundamental to the nation's food security but also integral to the pursuit of sustainable development. With a significant portion of the population dependent on agriculture and allied activities, the country grapples with persistent challenges such as resource depletion, the impacts of climate change, and rural poverty. Agricultural libraries, serving as vital centres of information and knowledge, have the potential to play a transformative role in addressing these issues. By offering access to relevant resources, disseminating critical information, and promoting sustainable practices among farmers, researchers, policymakers, and other stakeholders, these libraries can drive positive change. Recognizing their importance within the agricultural landscape is crucial for the development of effective policies and strategies aligned with the Sustainable Development Goals (SDGs). A thorough examination of the challenges faced by agricultural libraries will help identify key areas for improvement and enable the formulation of targeted measures to enhance their contribution to sustainable development (Chakrabarty, 2016).

This paper explores the relationship between agricultural libraries and the Sustainable Development Goals (SDGs), with a particular emphasis on the Indian context. It examines the roles, services, and resources provided by agricultural libraries to underscore their potential in advancing SDGs and promoting sustainable agricultural practices. Furthermore, the study addresses the current challenges and emerging opportunities faced by agricultural libraries in India, offering valuable insights into strategies for enhancing their impact and accelerating progress toward sustainable development.

2. AGRICULTURAL LIBRARIES IN INDIA: FULFILLING THE NEEDS OF THE RESEARCH SYSTEM

Agriculture is one of the most critical sectors in India, playing a central role in driving the nation's economy and development. Out of the country's 329 million hectares of land, approximately 160 million hectares are arable (Nation Master.com, 2015). The agricultural sector contributes around 26 percent to the national GDP, provides employment to 60 percent of the workforce, and remains the primary livelihood source for nearly 70 percent of the population (Balaguru, 2009). In this context, India hosts one of the world's largest agricultural research systems—namely, the National Agricultural Research System (NARS), which includes institutions under the Indian Council of Agricultural Research (ICAR) and State Agricultural Universities (SAUs). NARS has played a pivotal role in achieving self-sufficiency in food production and continues to address the nation's agricultural technology and information needs. The system comprises a research network of 102 ICAR institutes, 11 Agricultural Technology Application Research Institutes (ATARIs), and 73 agricultural universities (including 3 central agricultural universities and 5 universities with faculties of agriculture), spread across the country. To promote ICAR technologies and enhance outreach, 731 Krishi Vigyan Kendra (KVKs) are actively engaged in extension activities throughout India (Ministry of Agriculture & Farmers Welfare, 2024).

Agricultural libraries in India play a vital role in supporting the extensive agricultural research system by fulfilling the information and knowledge needs of researchers, policymakers, and various stakeholders. These libraries function as essential knowledge repositories and information centres, facilitating agricultural research, extension services, and the promotion of sustainable practices. The Indian agricultural library network comprises several key institutions and platforms, including the National Agricultural Library (NAL), ICAR Library, Agricultural Libraries Network (AGLINET), AgriCat & AgriCat 2.0, CeRA, KrishiKosh, KrishiPrabha, and numerous State Agricultural University Libraries (Jain & Gorla, 2001). These institutions collectively contribute significantly to the agricultural sector by performing a wide range of functions and responsibilities, as outlined below:

i) Knowledge Repositories:

Agricultural libraries in India function as essential repositories of knowledge, offering an extensive collection of research papers, books, and journals across diverse agricultural disciplines. Researchers depend on these libraries to access up-to-date scientific literature, research findings, and technical resources pertinent to their fields of study.

ii) Information Access and Dissemination:

Agricultural libraries play a crucial role in enabling access to online databases, digital repositories, and electronic journals, thereby ensuring that researchers receive timely and up-to-date information. They also support the dissemination of research findings by archiving and sharing scholarly publications with the wider academic and agricultural community.

iii) Supporting Interdisciplinary Research:

Agricultural libraries support interdisciplinary research by providing access to resources spanning a wide range of subjects, allowing researchers to integrate cross-disciplinary insights. This facilitates the exploration of complex agricultural issues that demand collaboration across multiple fields of study.

iv) Capacity Building and Training:

Agricultural libraries offer training and capacity-building programs for researchers and students, equipping them with essential information literacy skills required for effective research. These initiatives enhance their ability to efficiently navigate information resources, conduct comprehensive literature reviews, and utilize bibliographic and citation management tools.

3. STUDY OBJECTIVES

- To examine the role of agricultural libraries in advancing the Sustainable Development Goals (SDGs) within the Indian context.
- To explore the specific SDGs relevant to agriculture, along with their key focus areas and implications for sustainable agricultural development.
- To identify the current challenges faced by agricultural libraries in India in effectively contributing to the achievement of SDGs and promoting sustainability in the agricultural sector.
- To analyse the opportunities and strategic interventions available to agricultural libraries in India to enhance their effectiveness and broaden their impact on sustainable development.

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- To offer insights and recommendations for policymakers, library professionals, and stakeholders to reinforce the role of agricultural libraries in supporting SDGs and advancing sustainable agricultural practices in India (Babarinde, 2021).

4. THE RELATIONSHIP BETWEEN SUSTAINABLE DEVELOPMENT GOALS (SDGS) AND AGRICULTURAL LIBRARIES

The connection between libraries and the Sustainable Development Goals (SDGs) is of considerable significance, especially with regard to the role of agricultural libraries. As key repositories of knowledge and information, libraries hold the potential to play a vital role in advancing the SDGs, particularly in the agricultural sector. The following key points emphasize the critical role that agricultural libraries play in promoting the SDGs:

i) Knowledge Repository and Access:

Agricultural libraries act as crucial repositories of knowledge, offering a wealth of information on sustainable agricultural practices. They provide access to an extensive collection of literature, research findings, and resources related to the SDGs in agriculture. These libraries enable researchers, policymakers, and practitioners to access valuable information, fostering awareness and education on sustainable agricultural practices (Bychkova, 2023).

ii) Research and Innovation:

Agricultural libraries support research and innovation in sustainable agriculture by curating and sharing relevant scientific literature. They offer resources that enable researchers to stay informed about the latest advancements in sustainable farming practices, climate resilience, and biodiversity conservation. Additionally, libraries play a key role in bridging the gap between research institutions and practitioners, helping to translate research findings into practical, real-world applications.

iii) Capacity Building and Education:

Agricultural libraries contribute to capacity building by offering educational programs, workshops, and training sessions focused on sustainable agricultural practices. They provide valuable learning resources and materials to farmers, extension workers, and agricultural professionals, enhancing their knowledge and skills. These libraries serve as hubs for continuous learning, promoting a culture of lifelong education and professional development in sustainable agriculture.

iv) Collaboration and Networking:

Agricultural libraries act as hubs for collaboration and networking, bringing together diverse stakeholders within the agricultural community. They offer spaces and platforms where stakeholders can connect, share ideas, and collaborate on sustainable development initiatives. These libraries facilitate partnerships between researchers, policymakers, farmers, NGOs, and other organizations working toward achieving the SDGs in agriculture (Connaway, 2023).

v) Information Dissemination and Outreach:

Agricultural libraries play a pivotal role in disseminating information on sustainable agricultural practices to a broad audience. They design outreach programs, organize exhibitions, and launch awareness campaigns to promote the SDGs within the agricultural sector. These libraries contribute significantly to knowledge-sharing and public engagement, raising awareness about the importance of sustainable agriculture and its impact on communities and the environment (Gil *et al.*, 2018). Understanding the connection between libraries and sustainable development goals, particularly agricultural libraries, is essential for unlocking their full potential in advancing sustainability initiatives. Acknowledging the multifaceted roles of agricultural libraries enables enhanced contributions and a greater impact on achieving the SDGs. This understanding helps shape strategies to strengthen their capacity in supporting sustainable development, empowering stakeholders, and fostering positive change within the agricultural sector (Haridasan, 2021).

5. CHALLENGES ENCOUNTERED BY AGRICULTURAL LIBRARIES IN EFFECTIVELY ADVANCING SDGS IN INDIA

In India, agricultural libraries face numerous challenges as they work to effectively contribute to the advancement of SDGs and the promotion of sustainable development within the agricultural sector. By exploring these challenges, we gain important insights into the barriers that hinder the effective use of library resources and initiatives in supporting SDG achievement, highlighting key areas for improvement and development (Hijji, 2023).

5.1. Resource Limitations:

Agricultural libraries frequently encounter challenges in acquiring current resources and technologies necessary to address the wide-ranging aspects of the SDGs. Budget limitations and funding constraints restrict their ability to obtain relevant materials, thereby limiting the breadth of information accessible to users.

5.2. Digital Divide:

The digital divide presents a significant challenge, as many users lack access to online resources due to technological disparities. Inadequate internet connectivity in remote agricultural areas further limits access to digital information, hindering the dissemination of SDG-related knowledge and awareness.

5.3. Capacity and Training:

The lack of sufficient training and capacity-building programs for library staff limits their ability to effectively curate, disseminate, and educate users about the SDGs. Without specialized training in sustainable agriculture and related SDGs, library staff may struggle to provide the necessary support for users seeking relevant information.

5.4. Awareness and Outreach:

Limited awareness of the SDGs among farmers, researchers, and other stakeholders hampers the demand for relevant resources and services. Agricultural libraries face difficulties in effectively communicating the importance of the SDGs and their potential impact on the agricultural sector.

5.5. Interdisciplinary Approach:

The multidimensional nature of SDGs requires collaboration with experts from diverse domains beyond agriculture. Building partnerships with environmentalists, economists, health professionals, and social scientists is crucial, but challenges in establishing such collaborations exist (Mashroofa, 2022).

5.6. Local Context Relevance:

Although SDGs are global in scope, their local implementation necessitates resources that are tailored to address the specific challenges of India's agricultural landscape. The challenge lies in curating materials that effectively tackle local agricultural issues while aligning with the broader objectives of the SDGs.

5.7. Language and Accessibility:

Many valuable resources on the SDGs are available only in languages that are inaccessible to a large portion of India's population. Ensuring that these resources are translated into regional languages and presented in formats suitable for diverse audiences remains a significant challenge.

6. SUGGESTIONS FOR STRENGTHENING THE ROLE OF AGRICULTURAL LIBRARIES IN ADVANCING SDGs IN INDIA

This section provides a series of actionable recommendations designed to strengthen the role of agricultural libraries as key drivers in advancing Sustainable Development Goals (SDGs) within India's agricultural sector. These recommendations aim to address existing challenges, capitalize on available opportunities, and leverage partnerships, with the ultimate objective of enhancing the impact of agricultural libraries on sustainable development (Oyeniran, 2023).

6.1. Resource Allocation Enhancement:

Increase funding for agricultural libraries to enhance their ability to acquire essential resources. Allocate a specific portion of the budget for resources and initiatives directly related to the SDGs.

6.2. Technological Empowerment:

Invest in digital infrastructure to bridge the technological gap, ensuring broader access to online resources and services. Develop user-friendly applications and platforms that allow offline access to digital content.

6.3. Training and Capacity Building:

Implement regular training programs for library staff, focusing on sustainable agriculture, SDG integration, and effective user support. Partner with educational institutions to offer courses on information literacy for sustainable development.

6.4. Public Awareness Campaigns:

Launch awareness campaigns to emphasize the crucial role of agricultural libraries in advancing SDGs and promoting sustainable practices. Partner with agricultural extension services to engage rural populations and marginalized communities.

6.5. Cross-Disciplinary Collaboration:

Forge formal partnerships with research institutions, universities, NGOs, and experts across various fields to develop interdisciplinary resources. Host joint workshops, seminars, and conferences to foster cross-disciplinary knowledge exchange.

6.6. Localization of Resources:

Create region-specific content that aligns the SDGs with local agricultural challenges, offering practical and relevant solutions. Work closely with local experts and communities to ensure the content is accurate and applicable.

6.7. Multilingual Accessibility:

Translate existing resources into regional languages and dialects to improve accessibility and inclusivity. Ensure that materials are available in various formats, both print and digital, to cater to diverse audiences.

6.8. Monitoring and Evaluation Mechanism:

Establish a monitoring and evaluation framework to assess the effectiveness of agricultural libraries' initiatives in advancing the SDGs. Regularly measure outcomes, user satisfaction, and the adoption of sustainable practices. If implemented effectively, these recommendations have the potential to strengthen the role of agricultural libraries in India as vital contributors to SDG achievement. By strategically addressing challenges, leveraging opportunities, and fostering collaborations, these libraries can become essential hubs of knowledge, innovation, and progress within the agricultural sector (Poluru, 2023).

CONCLUSION

In conclusion, this study provides an in-depth analysis of the role of agricultural libraries in advancing Sustainable Development Goals (SDGs) from an Indian perspective. By thoroughly examining their contributions, challenges, opportunities, and strategies, we have gained valuable insights into the transformative potential of these libraries in promoting sustainable development within India's agricultural sector. The study highlights that while many SDGs are linked to agriculture, SDG 2 (Zero Hunger), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action) are particularly relevant to the agricultural field. Agricultural libraries, through their resources, services, and initiatives, play a crucial role in promoting sustainable practices and raising awareness about SDGs among various stakeholders. Recognizing and harnessing the role of agricultural libraries in achieving SDGs is essential. These libraries serve as knowledge hubs, bridging the gap between research, policy, and practice. Ultimately, this study underscores the idea that agricultural libraries are more than mere repositories of information—they are key enablers of sustainable development, shaping the future of India's agricultural sector and contributing to a greener, more sustainable future for generations to come.

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