

LIBRARIES AS HUBS FOR FOOD SECURITY INFORMATION AND INNOVATION IN OGUN STATE NIGERIA.

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Abstract: This paper investigated the role of libraries as hubs for food security information and innovation in Ogun State, Nigeria. The study examined how libraries provide access to agricultural research, policy frameworks and, indigenous knowledge that supports sustainable food production. The study also explored the role of libraries in disseminating agricultural innovations and best practices and; facilitating the adoption of modern farming techniques by farmers and stakeholders. The results revealed that 60% of respondents acknowledged libraries as key providers of food security information, yet accessibility remains a challenge, with only 55% agreeing that food security information is easily accessible. Regarding the dissemination of agricultural innovations, 67.5% of respondents recognized libraries as essential sources of agricultural information. However, collaboration between libraries and agricultural extension services was low, with only 47.5% of libraries confirming active partnerships. Furthermore, while 67.5% of respondents agreed that library services enhance farmers' knowledge of modern agriculture, the adoption rate of modern farming techniques stood at 57.5%. The study recommended that libraries should expand digital resources and provide open-access agricultural databases to enhance accessibility. Strengthening collaborations between libraries and agricultural stakeholders, including extension services and research institutions, is also essential. By addressing these challenges, libraries can improve food security and fostering agricultural innovation in Ogun State, Nigeria.

Keywords: Libraries, Food Security, Agricultural Innovation, Information Dissemination, Sustainable Agriculture.

Introduction

Food Security Information and Innovation

The availability of timely and reliable agricultural information remains restricted in developing areas where food security is global focal point. The role of libraries in securing food is vital because they serve as information centers that offer essential materials and sustainable farming practices alongside climate adaptation techniques and food production approaches to farmers and agricultural stakeholders (Kargbo 2020). Libraries ensure food security by providing easy access to relevant information that connects researchers to policymakers and farmers to enhance agricultural performance and better protect against food scarcity (Adepoju&Oyelude, 2021).

Food security benefits from library support when innovative farming advancements that boost agricultural efficiency, together with sustainability practices are distributed. The modern library system allows users to access digital tools together with extension services and training programs that educate farmers about innovative techniques such as precision farming hydroponics and climate-smart agriculture (Olawale et al., 2022). Library partnerships between research institutions and agricultural agencies help farmers obtain the most recent information about pest control, soil management and irrigation practices, according to Eze (2023).

Despite libraries' critical roles in food security, several challenges hinder their effectiveness in disseminating agricultural innovations. Limited digital resources, inadequate infrastructure, and a lack of collaboration between libraries and agricultural extension services reduce the accessibility of vital information for farmers (Aina, 2020). Additionally, many rural farmers face difficulties in utilizing library resources due to language barriers, literacy levels, and unfamiliarity with digital platforms (Okafor& Bello, 2021). Addressing these challenges requires a strategic approach that includes expanding digital access, increasing government investment in library infrastructure and promoting farmer education programmes.

Stronger partnerships between libraries and agricultural stakeholders are necessary to enhance the impact of libraries on food security. Agricultural extension officers, universities and non-governmental organizations (NGOs) should be actively engaged by libraries to transfer knowledge and encourage innovation adoption (Adetunji et al., 2023). Farmers also need to be enlightened about modern agricultural techniques as well as how to use them in farming and production of food through farmer centered training programs and community outreach programs (Nwankwo& Musa, 2024). This will guarantee that libraries continue to engage in the promotion of agricultural innovation and facilitate food security programmes.

Libraries as Knowledge Center for Food Security Information

Libraries play a critical role in disseminating agricultural innovations and best agricultural practices through food security information as knowledge centers for food security information. This is particularly important in Nigeria, where food security is a matter of deep concern due to the serious issues about the availability of access to agricultural research, indigenous knowledge and public policies that support sustainable food production (Abioye et al., 2021). These institutions provide this information to researcher's farmers. And policy makers when it is relevant.

The role of libraries exceeds that of knowledge preservation in actively helping agricultural innovation. A study published in the Journal of Developing Country Studies indicated that agricultural innovations have a positive effect on food security in Nigeria by promoting efficient farming techniques and resource management (Journal of Developing Country Studies, 2020). Case studies on successful agricultural models, training materials and extension services that help farmers adopt modern practices are available in libraries. Access to land to cultivate and ensure food security in Ogun state, Nigeria remains challenging, and libraries are key to solving this challenge. The research presented in SpringerLink underscores how the level of access to agricultural information can enrich the agricultural productivity of priority crops in Ogun State and subsequently improve food security (SpringerLink, 2020).

Libraries help farmers by sharing useful traditional and new farming ideas. According to Abioye et al. (2021), agricultural research libraries in Nigeria have taken proactive steps to document traditional farming methods, thereby preserving valuable knowledge for future generations. These libraries collaborate with local farmers to record and distribute indigenous agricultural practices that have proven effective over time. This process ensures

that smallholder farmers who often rely on traditional methods have access to scientifically validated techniques that enhance food production.

Libraries as Platforms for Food Systems Innovation

At the same time, libraries have a transformative role to play in helping to innovate in food systems as they are the points of source for the dissemination of knowledge, collaboration and advancement in research and technology. (Nigeria in particular where food security is a critical need plays host to libraries with access to agricultural research along with extension services and policy recommendation that fosters innovation in food production and distribution.) These institutions close the links between researchers, farmers and policymakers to ensure that the latest agricultural innovations are put into practice by those who can. But by making food system resilience and sustainability resources research publications and training programmes libraries can do..

A key aspect of food system innovation is the adoption of modern agricultural techniques, which libraries facilitate by providing access to research and best practices. According to the *Journal of Developing Country Studies* (2020), agricultural innovations, such as precision farming and climate-smart agriculture, significantly improve food security in Nigeria. Libraries act as repositories of knowledge on these technologies, helping farmers adopt more efficient and sustainable farming methods. Through partnerships with agricultural institutions, libraries disseminate research on soil fertility management, irrigation techniques, and pest control strategies, thereby contributing to increased agricultural productivity.

In Nigeria, land access and productivity are critical factors affecting food security, and libraries play an essential role in supporting innovative solutions. A study published in *SpringerLink* (2020) highlighted how information on land policies and priority crops can enhance food security outcomes. Libraries provide essential data on land tenure regulations, agribusiness opportunities and investment strategies, empowering farmers to make informed decisions. Furthermore, libraries facilitate discussions on innovative farming techniques, such as hydroponics and vertical farming, which are critical for increasing food production in land-limited areas.

Beyond agriculture, libraries contribute to food system innovation by supporting the documentation and dissemination of indigenous agricultural knowledge. Abioye et al. (2021) emphasized the role of agricultural research libraries in preserving traditional farming methods and integrating them with modern technologies. This process ensures that local farmers benefit from scientific advancements while maintaining culturally significant agricultural practices. By providing access to case studies on indigenous knowledge systems, libraries help to create hybrid approaches that combine traditional wisdom with contemporary innovations, improving food security and sustainability.

Objectives of the Study

To assess the availability and accessibility of food security information in libraries in Ogun State, Nigeria.

To examine library roles in disseminating agricultural innovations and best practices to farmers and stakeholders.

To evaluate the effects of library services on farmer's knowledge and adoption of modern agricultural techniques.

Methodology

This study adopted a descriptive statistical method using a questionnaire to collect data from respondents. A total of 200 questionnaires were distributed to lecturers and librarians at the Department of Library and Information Science schools in Ogun, Nigeria. The data collected were analyzed using descriptive and inferential statistical tools to align with the study objectives. Statistical analysis software tools such as the Statistical Package for Social Sciences (SPSS), NVivo and Excel were employed to process and interpret the data obtained from respondents,

ensuring a comprehensive analysis of the role of libraries as hubs for food security information and innovation in Ogun State, Nigeria

Results and Discussion

Table 1: Availability and Accessibility of Food Security Information in Libraries

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Libraries provide sufficient food security information resources.	40 (20%)	80 (40%)	30 (15%)	30 (15%)	20 (10%)
Food security information is easily accessible in local libraries.	35 (17.5%)	75 (37.5%)	40 (20%)	30 (15%)	20 (10%)
Libraries offer up-to-date materials on food security and agriculture.	25 (12.5%)	70 (35%)	50 (25%)	30 (15%)	25 (12.5%)
Farmers frequently use library resources to acquire agricultural knowledge.	30 (15%)	65 (32.5%)	40 (20%)	45 (22.5%)	20 (10%)

Source: Field Survey, 2025.

The results indicate that although a majority of respondents (60%) agree that libraries provide sufficient food security information resources, accessibility remains a challenge, with only 55% agreeing that food security information is easily accessible. Additionally, 47.5% of respondents believed libraries offer up-to-date materials, suggesting the need for continuous updates. The data also suggest that farmers’ engagement with library resources is moderate, with 47.5% affirming their usage while 32.5% disagreeing.

Table 2: Role of Libraries in Disseminating Agricultural Innovations and Best Practices

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Libraries are key sources of agricultural innovation.	50 (25%)	85 (42.5%)	35 (17.5%)	20 (10%)	10 (5%)
Farmers rely on library materials to learn modern farming techniques.	40 (20%)	75 (37.5%)	40 (20%)	30 (15%)	15 (7.5%)
Libraries collaborate with agricultural extension services.	30 (15%)	65 (32.5%)	50 (25%)	35 (17.5%)	20 (10%)
Libraries organize training and workshops for farmers.	35 (17.5%)	60 (30%)	45 (22.5%)	40 (20%)	20 (10%)

Source: Field Survey, 2025.

The findings suggest that libraries play a significant role in disseminating agricultural innovations, with 67.5% of respondents agreeing that libraries serve as key sources of agricultural information. However, reliance on library materials for modern farming techniques is moderate (57.5%). The collaboration between libraries and

agricultural extension services is relatively low, with only 47.5% agreement. Similarly, training and workshops organized by libraries need improvement because only 47.5% of respondents believe such initiatives exist.

Table 3: Impact of Library Services on Farmers’ Knowledge and Adoption of Modern Agricultural Techniques

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Library services improve farmer’s knowledge of modern agriculture.	55 (27.5%)	80 (40%)	35 (17.5%)	20 (10%)	10 (5%)
Libraries contribute to the increased adoption of modern farming techniques.	40 (20%)	75 (37.5%)	45 (22.5%)	30 (15%)	10 (5%)
Access to library resources has improved farmer’s productivity	35 (17.5%)	70 (35%)	50 (25%)	30 (15%)	15 (7.5%)
Library-based training programs have influenced agricultural decision-making.	30 (15%)	65 (32.5%)	55 (27.5%)	30 (15%)	15 (7.5%)

Source: Field Survey, 2025.

The results indicate that library services positively impact farmers’ knowledge of modern agriculture, with 67.5% of respondents agreeing the adoption rate of modern farming techniques is moderate (57.5%), suggesting a gap between knowledge and practice. Similarly, only 52.5% of respondents believed that library resources have improved farm productivity, and 47.5% believed that library-based training programmes influence decision-making, highlighting the need for more effective engagement strategies.

Conclusion

Results revealed that Ogun state libraries have great relevance in providing food security information as well as in the dissemination of agricultural innovation. However, areas that need improvement include; accessibility, there is no collaboration with extension services, low use of modern treatment and techniques. Updating materials, strengthening library outreach and increasing farmer engagement will strengthen libraries' impact on food security and innovation.

Recommendations

- i. Enhancing Accessibility of Food Security Information:** Libraries should improve access to food security information by expanding digital resources, providing open-access agricultural databases and ensuring that up-to-date materials are available in local languages to enhance farmers’ understanding and application.
- ii. Strengthening Collaboration with Agricultural Stakeholders:** Libraries should partner with agricultural extension services, research institutions, and government agencies to effectively disseminate modern farming techniques and innovations. Joint initiatives such as workshops, training programs, and demonstration farms can bridge the knowledge gap.
- iii. Implementing Farmer-Centered Training Programs:** Libraries should organize regular training sessions, seminars and hands-on workshops tailored to the specific needs of farmers. These programs should

focus on climate-smart agriculture, sustainable farming practices, and agribusiness opportunities to improve productivity.

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