

Integrating indigenous knowledge systems into academic library services in Nigeria

¹Nyong, Peace Asukwo, ²Eba Catherine Abeyi, ³Ifere Mimi-Patricia Eugene & ⁴Andeshi Agatha

¹⁻⁴Department of library and Information Science, Faculty of Social Science, University of Calabar

¹Orcid: 0009-0004-6045-1038 ⁴<https://orcid.org/0000-0002-2649-266X>.

Abstract

Integrating indigenous knowledge systems into academic library services is crucial in the lives of communities and should be made accessible to enhance the inclusivity of public libraries in Nigeria. Three objectives and research questions were formulated to guide the study. The population of the study consisted of 400 respondents drawn across academic libraries in cross river state. The purposive sampling technique was used and 350 respondents were used as sample for the study. Questionnaires were the instrument used to collect data for the study. Data were analyzed using frequency counts and mean scores through statistical Package for Social Sciences (SPSS, 25). Findings revealed Academic libraries play a transformative role in the preservation, promotion, and dissemination of Indigenous Knowledge (IK), especially in the context of today's knowledge driven and digitally connected world. Traditionally designed to serve the needs of academia, government, and industry, academic libraries have evolved into critical platforms for cultural preservation and inclusive knowledge sharing. Librarians, as information custodians, must develop competencies in digitization, metadata management, web content creation, and digital preservation to bridge the gap between indigenous and scientific knowledge systems.

Keywords: Indigenous Knowledge Systems, Academic, Library Services, Librarians, Librarianship

Introduction

Academic Libraries form a central and integral part of depository bank of education system and knowledge driven economy globally. In Nigeria, academic libraries are based solely on Western models of librarianship, where borrowed knowledge and culture are propagated as the dominant forms of establishment, thus sustaining the colonial heritage. In addition, they have been primarily transmitted through print media and, to some extent, electronic media, a reflection of their colonial heritage. Against the backdrop of the rich and enduring oral (i.e., word of mouth through proverbs, riddles, stories), corporeal (e.g., sound, patterns, motifs, colours) and visceral (i.e., instinctive, intuitive, gutty) tradition of Nigerian cultural knowledge and sciences. According to Ikoja-Odongo, & Lwehabura (2023), the Western model of librarianship leaves out the vast majority of these traditions in its knowledge productions. As such, rural populations, who are generally illiterate and unfamiliar with print and/or electronic media, have limited or no access to them. More importantly, the challenges of documenting Nigerian Indigenous Knowledge (AIK) traditions could serve as an important propeller of innovative forms of documentation where the complex nature of indigenous traditions could be duly registered, stored, shared and used. Libraries will have to find creative and decolonizing ways of capturing and disseminating the strong transdisciplinary roots and form of indigenous knowledge (IK) systems (Mnjama, 2022; Ikoja-Odongo & Lwehabura, 2023). This remains a great challenge

Indigenous knowledge is crucial in the lives of communities and should be made accessible to enhance the inclusivity of public libraries. In Nigeria, where some communities have been marginalized, libraries must implement mechanisms that contribute to this transformation. Frameworks that guide transformation processes can be appropriate (Chisita, & Chiparausha, 2022). The relevance of content in public libraries in Nigeria needs to be addressed, as it should be accessible and relevant for all user groups and communities. Integrating indigenous knowledge can enhance the accessibility and relevance of content, as well as the inclusivity of public libraries (Asamoah, & Ngulube, 2021). The paper emphasizes

the ongoing marginalization of indigenous oral knowledge within modern, Westernized academic institutions. Scholars like Haverkort (2019) have observed that such knowledge systems are rarely recognized or validated in these settings. Historically, discussions surrounding indigenous knowledge and libraries have often promoted a shift from oral traditions to written forms, as seen in the works of Amadi (2021), Newke (2025), and earlier UNESCO reports (2024). Alemna (2016) critiques this trend, arguing that the belief that oral traditions are incompatible with formal library services reflects the lingering colonial influence on Nigerian librarianship.

Building on these insights, the paper aims to contribute to the discourse on integrating Indigenous Knowledge Systems (IKS) with academic library services, specifically in the Nigerian context. By examining relevant Nigerian and international literature, the authors seek to establish both the necessity of creating synergy between indigenous and Western knowledge systems and the obstacles that hinder such integration.

Statement of the problem

Despite the rich cultural heritage and valuable indigenous knowledge systems (IKS) present in Nigeria, academic libraries have largely remained focused on western-centric knowledge paradigms. This disconnect has led to the marginalization of indigenous knowledge, which plays a critical role in areas such as agriculture, health, conflict resolution, environmental management, and local history. Academic libraries, as knowledge preservation and dissemination centers, have a unique role to play in bridging this gap. However, there remains a lack of structured efforts, policy frameworks, and professional competencies aimed at integrating IKS into academic library services. The absence of indigenous in academic libraries in Nigeria not only undermines the cultural identity and intellectual sovereignty of local communities, but also limits the diversity and relevance of resources available to students, researchers, and policymakers. In addition, there are challenges related to the documentation, validation, digitization, intellectual property rights, and standardization of indigenous knowledge for academic use. Without deliberate efforts to integrate IKS into academic library services, Nigeria risks losing a vital component of its heritage and limiting the scope of inclusive, locally relevant education and research. Therefore, there is a critical need to investigate the current state of indigenous knowledge integration in Nigerian academic libraries, identify the barriers and opportunities involved, and propose practical strategies to ensure that these knowledge systems are effectively incorporated into library services for sustainable development and cultural preservation.

Purpose of the study

The study specifically seeks to: Highlighting the importance of preserving and promoting Nigeria's indigenous knowledge systems (IKS) and cultural heritage.

- i. Exploring ways to incorporate IKS into academic library services, making them more relevant and responsive to the needs of Nigerian students and researchers.
- ii. Demonstrating how IKS can inform and enrich research in various fields, such as agriculture, medicine, and environmental science

Research Questions

- i. why is the preservation and promotion of Nigeria's indigenous knowledge systems (IKS) and cultural heritage important to national development?

- ii. what is the current level of inclusion of indigenous knowledge systems (IKS) in academic library services in Nigeria?
- iii. Has Indigenous Knowledge contributed historically to problem-solving and innovation in agriculture, medicine and environmental management in Nigeria.

Literature review

Indigenous knowledge system and cultural heritage

Indigenous Knowledge (IK), similarly termed as local, traditional, or rural people's knowledge, does not have a single definition (Rouse, 2019). Ngulube (2022), indicates that though scholars do not agree on the preferred definition of IK, they have used terms like indigenous technical knowledge, entho-ecology, local knowledge, rural people's knowledge, and traditional knowledge to capture its various forms and aspects. That is also indicative of its several and diverse meanings and connotations. However, indigenous knowledge systems refers to a body of knowledge practices and beliefs developed by indigenous people in relation to their culture, spiritual, ecological and environmental dimensions. Karbgo (2016), is however, of the view that IK is an important piece of information that is rapidly becoming extinct. There is therefore a need to preserve it before much of it is endangered. Also, according to Stevens (2018), local communities around the globe are in danger of losing their cultural and knowledge traditions. Without a doubt, IK is thus an underutilized resource in the development process, especially in Nigeria. The World Bank in 1998 declared that IK is endangered and needs to be urgently documented and shared. On the other hand, the World Bank (2018) reports that we can learn a lot from IK. It will help us to have a better appreciation of the local people and provide measures to improve their lives.

There have been a number of efforts to invigorate and promote IK. Dei (2022) argues that there is a vicious struggle among academics to appreciate and to come to terms with the prevailing influences in the production of knowledge. He therefore strongly advocates for development based on Nigerian contexts and the use of development approaches that nurture indigenous creativity and resourcefulness. IK is the best alternative to Western knowledge and is the basis of the local people's understanding. Development strategies that overlook IK usually fail to accomplish their anticipated objectives. (Grenier, 2018; Sillitoe, 2018). Every society needs to protect its knowledge systems: local traditions, organizations, etc., as well as its ability to access knowledge from both local and external sources. The insufficiency of such conditions is the major reason and outcome of Nigeria's poverty and our dispossession of material deprivation.

Nigerian Indigenous Education is best understood as a lifelong, community-based process through which individuals acquire essential knowledge, skills, values, and cultural norms from childhood to old age. It is embedded within the daily life of the community and emphasizes experiential, practical learning such as farming, carving, cooking, and construction skills directly linked to survival and social functioning (Ndlovu-Gatsheni, 2018; Mawere, 2015). This form of education is not bound by formal structures such as classrooms or examinations but is instead transmitted through oral traditions, observation, participation, and mentorship within real-life contexts (Semali & Asino, 2014). It is holistic and learner-centred, aiming to prepare individuals for meaningful roles in their society and to solve community problems. The emphasis on "learning by doing" remains a cornerstone of indigenous pedagogy and reflects the deep integration of knowledge with daily living (Keane, 2021). Contemporary scholars have noted that while Indigenous Knowledge Systems (IKS) remain under threat due

to globalization and the dominance of Western educational models, they still offer relevant and sustainable frameworks for education, particularly in Nigerian rural contexts where formal systems often fail to reach or serve the people effectively (Mapara, 2019; Keane, 2021).

In traditional Nigerian Indigenous Education systems, formal examinations were not used to measure learning outcomes. Instead, individuals were considered to have graduated once they demonstrated practical competence in the skills and knowledge acquired during their training. This performance-based evaluation contrasts sharply with modern education systems, where formal certification, often through written examinations, can sometimes be awarded to learners who may lack the practical understanding or real-world application of their field of study. Indigenous education emphasizes holistic and experiential learning rooted in cultural traditions, community values, and spirituality. It relies on oral transmission, observation, imitation, storytelling, group collaboration, and apprenticeship within a socio-cultural context. Knowledge is viewed as sacred and deeply personal, constructed through lived experiences and embedded in local customs and identities (Battiste, 2023; McKinley & Stewart, 2020).

Indigenous knowledge systems and academic library services

Academic libraries can support indigenous knowledge systems by actively documenting, preserving, and providing access to oral traditions, local practices, and knowledge held by community members. This assertion has been supported by Ogunkeyede, Ndukwe, Akinola and Olaseigbe (2023) recognized the unique value embedded in local traditions and practices and concluded that to enhance the propagation of indigenous knowledge and aid it in taking its place in nation-building, the public library must hold its responsibilities for identifying, collating and sorting indigenous knowledge. Indigenous knowledge provides the basis for problem-solving and represents vital component of global knowledge for developmental issues (Adebayo & Adeyemo, 2018). According to Ezeanya-Esiobu (2019), indigenous knowledge covers all fields of human endeavour including, but not limited to, agriculture, environment, pharmacology, health, trade and economics, and political systems. Most of the local communities in African countries depend on indigenous agricultural practices where majority of the food produced comes from traditional farming (Aboyade&Adeyemo,2019). With indigenous knowledge, indigenous people determine when rain will come, consequently, when to plant, various farming systems to employ that will enhance soil fertility, increase yield, harvest, weed control, plant propagation, pest management and plant protection techniques, as well as storage, preservation, processing and marketing methods (Adigun,2014). Examples are using burnt cow dungs and neem (dogonyaro) seeds for preserving legumes and the use of manure as fertilizer with long residual content (Chinaki et al., 2015).

Similarly, Anyira, Onoriode, and Nwabueze (2010), indicate that the IK system assists local people of the Niger Delta region in Nigeria preserve their fishes, foods, and work of arts. There is a growing appreciation of the value of IK. It has become valuable not only to those who depend on it in their daily lives, but to modern industry and agriculture as well. Adedipe et.al (2004) added that small scale resource farmers have good reasons for sticking with their local knowledge and farming practices, because modern technologies can only be successful and sustainable if IK is taken into consideration In the aspect of traditional medicine, research has shown that local indigenes in various communities in Nigeria make use of extracts from plants to treat and cure various ailments and diseases. For example, Adigun (2014) posited that through indigenous knowledge, local people engage in traditional medical practices such as the use of various herbs to cure different ailments, heat therapy, quarantine, incisions, bone setting and surgery. It is estimated that 85% of Nigerians access traditional medicine for

healthcare, social and psychological benefits. Extracts from plants and animals from diverse parts of Nigeria have been found to be useful for treating diseases such as malaria, diabetes, epilepsy, dementia, sickle cell disorders and inflammation (Adeleja 2006). According to WHO (2019), 40% of modern medicine was created from plants that were originally used locally and are drawn from indigenous knowledge, and as such indigenous knowledge has come to be recognized as a valuable resource in the growth of global health.

Academic libraries often maintain specialized collections that support subject-specific learning in fields such as science, engineering, humanities, and social sciences (Okojie, 2021). Beyond collection development, these libraries offer essential services such as reference assistance, information literacy instruction, interlibrary loan services, and digital resource navigation support (Popoola & Haliso, 2021). Through these activities, academic libraries contribute significantly to the academic institution's mission by supporting curriculum delivery, enabling scholarly research, and ensuring the preservation and dissemination of knowledge (Fasae & Aladeniyi, 2023). Within the broader framework of libraries, including national, public, and special libraries academic libraries form a unique and indispensable category. Their role is central to the functioning of educational institutions such as universities, colleges, and research centres (Ifijeh & Yusuf, 2020). Academic libraries serve as access points for equitable information retrieval and knowledge dissemination, supporting institutional missions of teaching, research, and learning (Fasae & Aladeniyi, 2023).

Indigenous knowledge services and its relevance in informing and enriching research in various fields

AIKS is holistic and communal, encompassing a broad spectrum of knowledge systems, technological, agricultural, educational, philosophical, and governance, rooted in local ecosystems, oral traditions, and ancestral land (Emeagwali, 2020). Though unwritten, it is a living body of knowledge transmitted through rituals, storytelling, and everyday practices, reflecting both cultural identity and community resilience (Dondolo, 2005; Nel, 2008). Importantly, AIKS is not monolithic. Each Indigenous community across Nigeria, whether the Batwa of Uganda or the Ijaw of Nigeria, holds distinct worldviews, belief systems, and cultural logic. This diversity enriches the continent's intellectual landscape and offers practical, context-specific solutions to local challenges. Embracing this multiplicity strengthens cultural pride, supports place-based development, and reclaims narratives historically marginalized by colonial systems (Dei et al., 2008). Agriculture is one area where AIKS continues to demonstrate its relevance. Before the advent of synthetic pesticides and Western monoculture models, Nigerian farmers practiced sustainable techniques such as intercropping, fallowing, and the use of plant-based pest control. These practices ensured biodiversity, soil fertility, and food security (Nyongesa et al., 2023; Altieri & Nicholls, 2020). Their continued relevance in the face of climate change shows the enduring adaptability of Indigenous systems.

Beyond agriculture, the spiritual dimensions of AIKS, such as sacred forests and nature deities like Osun, have contributed to environmental conservation and intergenerational stewardship (Agbaje et al., 2022). These beliefs reinforce community responsibility and environmental ethics, deeply embedding conservation into cultural and religious life. AIKS also has immense potential in contemporary governance and development. Precolonial Nigerian societies often exhibited inclusive, accountable political systems where women could lead as warriors, queens, or regents, cases exemplified by historical figures like Queen Amina of Zaria (Olaitan & Oloruntoba, 2023). These governance traditions offer alternative models that can inform more culturally relevant and inclusive systems today. Moreover, Indigenous knowledge is increasingly being integrated into entrepreneurship and youth development.

Among communities such as the Batwa, traditional skills are being passed to younger generations, fostering sustainable livelihoods and reinforcing cultural identity (Ampumuza et al., 2020; Muasya et al., 2023). This shows that AIKS is not a relic of the past but a strategic asset for contemporary innovation, resilience, and economic empowerment. In essence, AIKS is a symbol of Nigerian self-determination. It is both a tool for sustainable development and a cultural compass that anchors Nigerian societies in their historical, spiritual, and ecological realities. Recognizing, revitalizing, and protecting these knowledge systems is not only a moral imperative but also a necessary pathway toward building a more inclusive and sustainable Nigerian future.

The current gap or marginalization of IKS in academic libraries.

Indigenous Knowledge Systems (IKS) are the traditional knowledge, practices, and beliefs of indigenous communities, but they are often marginalized or excluded from academic libraries. This marginalization is due to several challenges, including a lack of recognition, limited documentation, cultural sensitivity, and intellectual property concerns. Marginalizing IKS can lead to the loss of cultural heritage, limited access, and inadequate representation, perpetuating the dominance of Western knowledge systems (Asamoah & Ngulube, 2023). To address this issue, academic libraries can collaborate with indigenous communities, develop inclusive collection policies, provide cultural sensitivity training to library staff, and use digital platforms to preserve and provide access to IKS. By addressing the marginalization of IKS in academic libraries, we can promote a more inclusive and diverse representation of knowledge, enriching academic discourse and preserving cultural heritage (Chigwada & Ngulube, 2024). By addressing these challenges, we can promote a more diverse representation of knowledge and enrich academic discourse.

Indigenous Knowledge Systems (IKS) face several challenges, including lack of recognition, limited documentation, cultural sensitivity, intellectual property concerns, Western bias, lack of standardization, funding constraints, and institutional barriers. These factors contribute to the marginalization of IKS, limiting their representation and preservation. IKS are often transmitted orally, making documentation and preservation difficult (Oyelude, 2023). Cultural sensitivity and intellectual property concern also arise due to their collective nature.

Funding constraints and institutional barriers further hinder IKS's representation and preservation. Marginalizing Indigenous Knowledge (IK) can lead to various consequences, including loss of cultural heritage, limited access to valuable knowledge, inadequate representation in academic discourse, cultural erasure, missed opportunities for innovation, disempowerment of indigenous communities, and a knowledge gap between indigenous and Western knowledge systems (Mhlongo & Ocholla, 2021).

Methodology

The study adopted descriptive survey, which explains events as they are without manipulations. It is used for studies which at collecting data and describing in a systematic manner. This design is suitable for this study since the researchers intend to survey and integrating indigenous knowledge systems into academic library services in Nigeria. Specifically, the study was carried out in Cross river state comprising; the University of Calabar, University of Cross River State Calabar, university of education and entrepreneurial development Akamkpa, college of nursing sciences Calabar, Federal college of education Obudu, Federal polytechnic Ugep, Author Jarvis University Akpabuyo, and the college of agriculture Obubra. This research design is appropriate for this study in that it describes the

various characteristics of the population as well as explore the relationship between the variables in the study. The population of the study is 4,406,200 (According to the National Population Commission). The study used a multi stage sampling technique. This involves the use of stratified random sampling, simple random sampling, and purposive sampling technique. A sample size of 400 respondents was used for the study. The sample was determined using the Taro Yamane's sample size determination. The formula is presented as follows: The study adopted primary data obtained through questionnaire. The primary sources of data were the questionnaire.

$$n = \frac{N}{1 + N(e)^2}$$

where:

n= Sample size

N= Population size= 4,406,200 e= level significance =0.05 n= 4,406,200

$$= 1 + 4,406,200(0.0)^2$$

$$n = \frac{4,406,200}{1 + 4,406,200(0.05)^2}$$

$$n = \frac{4,406,200}{1 + 4,406,200(0.05)^2}$$

$$n = \frac{4,406,200}{1 + 4,406,200(0.0025)}$$

$$n = \frac{4,406,200}{1 + 4,406,200(0.0025)}$$

$$n = \frac{4,406,200}{11,016.5}$$

$$n = 399 \cong 400$$

Constituting about 40% of the population. The instrument used for data collection was a selfstructured questionnaire titled 'integrating indigenous knowledge systems into academic library services in Nigeria'. Specifically, frequency counts and mean scores were used. Data collected were then presented in tables and organized based on research questions. The responses were tabulated using frequency tables, and then treated by computing the weighted mean for each item in the questionnaire on a 4-point rating scale as follows: SA= strongly Agreed (4points); A=Agree (3points); D=Disagree (2points) and SD=Strongly Disagree (1point). To arrive at a decision, any item within the mean range between 0.50 and 1.49 were regarded as strongly disagree; while any item within the mean range between 1.50 and 2.49 were regarded as disagree by the respondents. Those ranging from 2.50-3.49 and 3.50-4.00 were considered as agree and strongly agree respectively.

Results and discussion

General description of the study

Table 1: Response Rate

No of Questionnaires	Administered Questionnaires	No of Returned Percentage (%)
400	350	350%

Source: survey Data, 2025

A total of 400(400%) questionnaires were projected for this study; 350(350%) of the questionnaires were properly completed and returned in good shape while 50(50%) were either lost or improperly filled. Therefore, data analysis is based on the total number of 350 questionnaires received.

Result

Research Question 1: Why is the preservation and promotion of Nigeria's indigenous knowledge systems (IKS) and cultural heritage important to national development? Mean rating and standard deviation on the preservation and promotion of Nigeria’s indigenous knowledge systems and cultural heritage importance to national development

TABLE 2

S/N	Items	N	X	Remark
1	Integration of indigenous knowledge system will contribute to sustainable development practices?	85	3.50	Strongly agree
2	Preservation of Nigeria’s cultural heritage will foster	85	3.71	Strongly Agree
3	National unity, identity and social cohesion in a multi-ethnic society. Integration of indigenous knowledge will promote economic development through tourism, arts and Cultural industries in Nigeria?	85	3.45	Agree
4	Integration of indigenous knowledge will enhance learning and innovation in Nigeria educational system?	85	3.60	Strongly Agree

- 5 Integration of indigenous knowledge will impact on intellectual and human capital development. 85 3.70 Strongly Agree
Cluster mean 85 3.60 Strongly Agree

Source: Survey Data, 2025.

Table 2 presents respondents' responses on the preservation and promotion of Nigeria's indigenous knowledge systems and cultural heritage importance to national development. Result of the analysis showed that the respondents strongly agreed that integration of indigenous knowledge system will contribute to sustainable development practices in

Nigeria with a mean value of 3.50; Preservation of Nigeria's cultural heritage will foster National unity, identity and social cohesion in a multi-ethnic society with a mean value of 3.71. Respondents agreed with integration of indigenous knowledge will promote economic development through tourism, arts and cultural industries in Nigeria with a mean value of 3.45. They strongly agree that the integration of indigenous knowledge will enhance learning and innovation in Nigeria educational system with a mean value of 3.60.

They strongly agree that integration of indigenous knowledge will impact on the intellectual and human capital development of Nigerians. With a mean value of 3.70. Result of the analysis as shown on the table implies that all items listed in the table are on the preservation and promotion of Nigeria's indigenous knowledge systems and cultural heritage importance to national development as evidence from their mean scores which are above the benchmark of 2.50.

Research Question 2: What is the current level of inclusion of indigenous knowledge systems (IKS) in academic library services in Nigeria? Mean rating and standard deviation on the current level of inclusion of indigenous knowledge systems in academic library services in Nigeria.

TABLE 3

S/N	Items	N	X	Remark
1	Academic libraries collect and preserve materials	85	3.60	Strongly Agree
2	Libraries provide access to resources or databases That include indigenous knowledge content	85	3.40	Agree
3	Libraries organize or support programs that Promote indigenous knowledge or cultural heritage	85	3.30	Agree

- | | | | | |
|---|---|----|------|----------------|
| 4 | Institutional libraries have set policies in place to guide the integration of indigenous knowledge into the system | 85 | 3.40 | Agree |
| 5 | There are barriers to the inclusion of indigenous knowledge in your academic library | 85 | 3.65 | Strongly Agree |
| | Cluster mean | 85 | 3.60 | Strongly Agree |

Source: Survey Data, 2025.

Data presented in Table 3 revealed that respondents agreed with that academic libraries collect and preserve materials with a mean of 3.60; libraries provide access to resources or databases that include indigenous knowledge content with a mean value of 3.40; they agreed that libraries organize or support programs that promote indigenous knowledge or cultural heritage with a mean of 3.30. Similarly, respondents agreed that institutional libraries have set policies in place to guide the integration of indigenous knowledge into the system. They strongly agree that there are barriers to the inclusion of indigenous knowledge in your academic library with a mean value of 3.65. From the result of analysis presented in table 3, it is revealed that respondents agreed with all the items listed with a cluster mean of 3.60. Therefore, all the items showed the level of inclusion of indigenous knowledge systems in academic libraries in Nigeria as agreed upon the respondents. Research Question 3: Has Indigenous Knowledge contributed historically to problem-solving and innovation in agriculture, medicine and environmental management in Nigeria? Mean rating and standard deviation on historical contribution of indigenous knowledge to problem-solving and innovation in agriculture, medicine and environmental management in Nigeria.

TABLE 4

S/N	Items	N	X	Remark
1	People are familiar with traditional practices used in agriculture, medicine, or environment in your community	85	3.70	Strongly Agree
2	Indigenous knowledge has significantly contributed to solving problems in medicine, or agriculture in Nigeria	85	3.50	Agree
3	Nigeria has benefited the most in indigenous knowledge	85	3.50	Agree
4	I and people in my community frequently apply indigenous knowledge solve related problems in farming, or environment.	85	3.45	Agree
5	Indigenous knowledge system has improved health practices in Nigeria	85	3.40	Agree
	Cluster mean	85	3.50	Strongly Agree

Source: Survey Data, 2025.

Data presented in Table 4, revealed that respondents strongly agreed with that people are familiar with traditional practices used in agriculture, medicine, and environment in our community with a mean of 3.70; indigenous knowledge has significantly contributed to problem solving in agriculture, medicine and environment in Nigeria with a mean value of

3.50; they agreed that agree that Nigeria has benefited the most n using indigenous knowledge with a mean of 3.50. Similarly, respondents agreed that people in their community frequently apply indigenous knowledge to solve problem related to medicine, farming and environment with a mean value of 3.45. They agree that indigenous knowledge system has improved health practices in Nigeria with a mean value of 3.40. From the result of analysis presented in table 4, it is revealed that respondents agreed with all the items listed with a cluster mean of 3.50. Therefore, all the items showed a positive contribution of indigenous knowledge to problem-solving and innovation in agriculture, medicine and environmental management in Nigeria as agreed upon the respondents.

Discussion of findings

The discussion of findings of this research will be based on three research questions. Thus findings on research question 1 revealed on the preservation and promotion of Nigeria's indigenous knowledge systems and cultural heritage importance to national development to include: Integration of indigenous knowledge system will contribute to sustainable development practices; Preservation of Nigeria's cultural heritage will foster national unity, identity and social cohesion in a multi-ethnic society; Integration of indigenous knowledge will promote economic development through tourism, arts and cultural industries in Nigeria; Integration of indigenous knowledge will enhance learning and innovation in Nigeria educational system; Integration of indigenous knowledge will impact intellectual and human capital development. These findings is in line with Ogunkeye, Ndukwe, Akinola and Olaseigbe, (2023) who revealed the unique value embedded in local traditions and practices arising from indigenous knowledge especially in agriculture and medicine.

On research question 2, findings revealed on the current level of inclusion of indigenous knowledge systems in academic library services in Nigeria. These include: Academic libraries collect and preserve materials; Libraries provide access to resources or data that include indigenous knowledge content; Libraries organize or support programs that promote indigenous knowledge or cultural heritage; Institutional libraries have set policies in place to guides the integration of indigenous knowledge into the system; there are barriers to the inclusion of indigenous knowledge in your academic library. The findings agree with Nyantakyi-Baah, 2021). Beyond digital innovations, academic libraries can contribute to IK preservation through policy advocacy and community initiatives. Strategies such as integrating IK into national curricula, organizing essay competitions, and hosting talk shows with traditional rulers can raise awareness and foster appreciation for Indigenous heritage. Through professional associations like the Nigerian Library Association (NLA), academic librarians can advocate for the inclusion of IK in educational policies and collaborate with grassroots organizations to promote local engagement (IFLA, 2023).

Findings on question 3; revealed historical contribution of indigenous knowledge to problem solving and innovation in agriculture, medicine and environmental management in Nigeria. These include: People are familiar with traditional practices used in agriculture, medicine, or environment in your community; Indigenous knowledge has significantly contributed to solving problems in medicine, or agriculture in Nigeria; Nigeria has benefited the most in indigenous knowledge; I and people in my community frequently apply indigenous knowledge solve related problems in farming, or environment; indigenous knowledge system has improved health practices in Nigeria. The (Agbaje et al., 2022). These beliefs reinforce community responsibility and environmental ethics, deeply embedding conservation into cultural and religious life. AIKS also has immense potential in contemporary governance and development. Precolonial Nigerian societies often exhibited inclusive, accountable political

systems where women could lead as warriors, queens, or regents, cases exemplified by historical figures like Queen Amina of Zaria.

Conclusion

Based on the findings of the study, the following conclusions are drawn: respondents opined that by integrating indigenous knowledge systems into academic services in Nigeria applying these skills, librarians can serve as mediators between traditional knowledge holders and contemporary information infrastructures, ensuring that IK is preserved, accessible, and recognized within global knowledge systems. Modern academic libraries must also create inclusive physical and digital environments that foster community engagement, dialogue, and collaboration around Indigenous knowledge. These efforts not only contribute to the preservation of cultural heritage but also integrate IK into broader academic and policy discourses.

Recommendations

1. Academic institutions and library associations should provide continuous professional development opportunities for librarians in areas such as digitization, metadata creation, digital preservation, and web content development. This will enhance their ability to manage Indigenous Knowledge in modern formats.
2. Academic libraries should be redesigned, both physically and virtually, to serve as inclusive community hubs where local populations can engage in dialogue, share Indigenous Knowledge, and participate in collaborative knowledge creation.
3. Libraries should adopt Information and Communication Technologies (ICTs), including platforms such as YouTube, Facebook, Google Docs, and X (formerly Twitter), to document and share IK. These tools are especially useful for preserving oral traditions and reaching wider audiences, including non-literate populations.
4. Librarians should actively partner with traditional knowledge holders, elders, herbalists, and local institutions to document Indigenous practices. This requires trust-building, cultural sensitivity, and shared ownership of the documentation process.
5. Library professionals, through associations such as the Nigerian Library Association (NLA), should advocate for the formal inclusion of Indigenous Knowledge in national education policies and academic curricula. Libraries can also organize essay competitions, seminars, and talk shows to increase IK awareness.

References

- Adeleke, A. A., & Emeahara, E. N. (2019). Relationship between information literacy and use of electronic information resources by postgraduate students in private universities in Oyo State, Nigeria. *Library Philosophy and Practice*, 1–24. <https://digitalcommons.unl.edu/libphilprac/2355/>
- Agbaje, A. A., Ilesanmi, T. T., & Adebayo, S. O. (2022). Sacred groves and Indigenous ecological knowledge in Nigeria: Implications for biodiversity conservation. *Nigerian Journal of Ecology*, 60(2), 134–145. <https://doi.org/10.1111/aje.12937>

- Alemna, A. A. (2016a). Development of school libraries in Nigeria. *Library Review*, 45(6), 41–46. <https://doi.org/10.1108/00242539610129114>
- Altieri, M. A., & Nicholls, C. I. (2020). Agroecology and the emergence of a post COVID-19 Agriculture. *Agriculture and Human Values*, 37(3), 525–526. <https://doi.org/10.1007/s10460-020-10043-y>
- Amadi, F. C. (2021). Decolonizing knowledge in Nigerian academic libraries: Challenges and prospects. *Nigerian Journal of Library, Archives and Information Science*, 31(2), 135–148.
- Ampumuza, C., Rukundo, P. M., & Turyasingura, W. (2020). Indigenous knowledge and youth employment: The case of the Batwa communities in Uganda. *International Journal of Cultural Studies*, 23(6), 845–859. <https://doi.org/10.1177/1367877920902545>
- Asamoah, C., & Ngulube, P. (2023). Exploring models for indigenous knowledge management in academic libraries of Nigeria. *Information Development*, 39(1), 14–23. <https://doi.org/10.1177/02666669211052928>
- Battiste, M. (2023). *Decolonizing education: Nourishing the learning spirit*. Purich Publishing.
- Chigwada, J., & Ngulube, P. (2024). Librarians' role in the preservation and dissemination of indigenous knowledge. *Library Management*, forthcoming. <https://doi.org/10.1177/03400352231217270>
- Chikaire, J., Nnadi, F. N., Atoma, C. N., Ejiogu-Okereke, N. N., & Oguegbuchulam, M. N. (2012). Indigenous knowledge systems: The need for reform and the relevance to sustainable development. *Research Journal of Agricultural and Environmental Management*, 1(5), 118–127.
- Chisita, C. T., & Chiparausha, B. (2022). Re-imagining the role of public libraries in Nigeria through indigenous knowledge systems. University of South Nigeria Institutional Repository (UNISA). Retrieved from <https://uir.unisa.ac.za/handle/10500/29571>
- Dei, G. J. S., Hall, B. L., & Rosenberg, D. G. (2008). *Indigenous knowledge in global contexts: Multiple readings of our world*. University of Toronto Press.
- Dondolo, L. (2005). Museums and the redefinition of indigenous knowledge as a tool for development: The South Nigerian case. *Indilinga: Nigerian Journal of Indigenous Knowledge Systems*, 4(1), 104–120.
- Emeagwali, G. (2020). Nigerian indigenous knowledge systems: Implications for the curriculum. In A. Abdi (Ed.), *Decolonizing global citizenship education* (pp. 115–132). Springer. https://doi.org/10.1007/978-3-030-46309-8_7
- Enekwizu, V. N., & Nwosu, O. C. (2022). Decolonizing academic libraries in Nigeria: The role of Indigenous knowledge systems. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac/7392>
- Fasae, J. K., & Aladeniyi, G. A. (2023). Academic library services and their impact on teaching and research productivity: A study of Nigerian universities. *Journal of Academic Librarianship*, 49(1), 102642. <https://doi.org/10.1016/j.acalib.2022.102642>
- Fataar, A., & Subreenduth, S. (2016). The search for home and meaning: Disruptions and reconstitutions of epistemic justice. *Educational Philosophy and Theory*, 48(5), 486–500.

<https://doi.org/10.1080/00131857.2015.1112768>

- Gorjestani, N. (2020). ICT and Indigenous Knowledge: Opportunities and Challenges. UNESCO Working Paper Series on Knowledge Societies.
- Grenier, L. (2018). Working with indigenous knowledge: A guide for researchers. Ottawa: International Development Research Centre (IDRC).
- Haverkort, B. (2019). Interfacing Western science and Nigerian Indigenous Knowledge systems: Toward a holistic approach to knowledge. In Bozalek, V., Braidotti, R., Zembylas, M., & Höhne, A. (Eds.), *Socially Just Pedagogies: Posthumanist, Feminist and Decolonial Perspectives in Higher Education* (pp. 157–174). Bloomsbury Publishing.
- Ifijeh, G., & Yusuf, F. (2020). Academic libraries and the digital transformation in higher education: A perspective from developing countries. *The Journal of Academic Librarianship*, 46(5), 102226. <https://doi.org/10.1016/j.acalib.2020.102226>
- Ikoja-Odongo, R., & Lwehabura, M. J. F. (2023). Information access and indigenous knowledge: The role of academic libraries in, Nigeria. *Nigerian Journal of Library, Archives & Information Science*, 33(1), 1