

## Expanding Library Services for Indigenous Community Posteriy: A Case of Selected Public Libraries in Botswana

**Priti Jain**

Department of Library and Information Science, University of Botswana, Gaborone, Botswana

E-mail: [jainp@mopipi.ub.bw](mailto:jainp@mopipi.ub.bw)

**Lynn Jibril**

Department of library services, University of Botswana, Gaborone, Botswana

E-mail: [Lynn.jibril@mopipi.ub.bw](mailto:Lynn.jibril@mopipi.ub.bw)



Copyright © 2016 by Priti Jain & Jibril Lynn. This work is made available under the terms of the Creative Commons Attribution 4.0 International License:

<http://creativecommons.org/licenses/by/4.0>

---

### Abstract:

*Libraries and librarians are uniquely positioned to play a vital role in supporting indigenous communities. Recognizing this fact, increasingly librarians around the world are undertaking interactive activities with indigenous communities that bring indigenous communities on board as equal partners in knowledge creation, knowledge sharing and its utilisation and thus enrich their lives. Libraries are providing indigenous materials and training to the community to help the community in documenting their indigenous knowledge (IK) and support in ensuring that the intellectual property rights of indigenous communities are not exploited. Public libraries are expected to collect, store, and provide access to different types of information including IK for all people in the society. Botswana public libraries have initiated a number of projects to support indigenous communities and capture and document their knowledge. This paper was motivated to discuss and share how selected public libraries in Botswana are involved in capturing and documenting indigenous knowledge from indigenous communities for its posterity and enhanced accessibility. To accomplish this purpose, this study pursued three objectives: to identify how libraries capture, store and preserve indigenous knowledge; to find-out how libraries make IK knowledge accessible to users, and to investigate whether librarians encounter any challenges in preservation and dissemination of indigenous knowledge or not. The study revealed two major ways of providing access to indigenous knowledge: face to face forums and using CDs. The major challenges are: lack of adequate infrastructure and funds and unwillingness to disclose culture information. The paper recommends for librarians' proactive attitudes, strong collaborative partnership with indigenous communities, support from Government, and,*

*recognition of indigenous people to over some of the challenges and develop and preserve indigenous knowledge and indigenous community for social and economic development.*

**Keywords:** Indigenous knowledge; Public Libraries; Public librarians; Indigenous community; Botswana.

---

## 1. Introduction

With the advancement of technologies, today Science and society has begun to recognize that indigenous knowledge and indigenous knowledge systems are blending with the modern scientific and technical knowledge. Increasingly, IK is gaining importance world-wide. Article 15 of the WSIS Declaration states, “In the evolution of the Information Society, particular attention must be given to the special situation of Indigenous peoples, as well as to the preservation of their heritage and their cultural legacy” (WSIS, 2013). In Australia Charles Darwin University runs the School of Australian Indigenous Knowledge Systems. In 1997, India launched a Honey Bee Network called “Innovation Database”, which has more than 1, 00,000 ideas, innovations and traditional knowledge practices to enrich the lives of the people (SRISTI, 2016). In 2014, University Malaysia Sarawak and the Penan community, one of the biggest and oldest settlements of the Penans in Baram region of Sarawak East Malaysia, initiated a research project in Long Lamai on digitalising and preserving the Oroo, sign language to harness indigenous community's tacit and creative expressions (IIM, 2015). IK affects the well-being of the majority of people in developing countries. As voiced by Dhewa (2011, Online), “Modern science cannot meet the demands of the developing world without harnessing indigenous knowledge”. “The African indigenous knowledge systems, beliefs and practices amply demonstrate an advancement of the African people’s ecological conservation methods, agricultural and scientific methods, sculptures, basketry, pottery and medical practice” (Gudhlanga & Makaudze, 2012:72). South African indigenous communities have been practicing bioprospecting and product development for millennia (Chabalala, 2008). In Niger Delta Region of Nigeria, IK helps indigenous communities produce food, acquire education and vocational skills, and conserve their natural environments, among many other things (Anyira, Onoriode & Nwabueze, 2010). There is Center for Indigenous Knowledge Systems (CEFIKS) in Accra, Ghana as an independent, but affiliate branch in the United States. CEFIKS mission is to examine, preserve, adapt and utilize the local knowledge of various communities and people in Ghana and the West African region (CEFIKS, 2010).

Part of the mandate of public and national libraries is to document and preserve the cultural heritage of the nation, which includes indigenous knowledge (Makinde & Shorunke, 2013:11). Hence, the largest International Federation of Library Associations and Institutions (IFLA) acknowledges the intrinsic value and importance of indigenous traditional knowledge and local community knowledge, and the need to consider it holistically in spite of contested conceptual definitions and uses (IFLA, 2014). Recognizing the importance of indigenous knowledge, particularly public libraries are playing important roles in management and preservation of indigenous knowledge all over the world including Botswana public libraries.

## **2. Definitions of Key Concepts**

IK has been defined in various ways: cultural knowledge, environmental knowledge, community knowledge, local knowledge, traditional knowledge, farmer's or pastoralist's knowledge, folk knowledge, traditional wisdom, traditional science, people's knowledge, indigenous traditional knowledge, indigenous technical knowledge, traditional environmental knowledge, rural knowledge, traditional ecological knowledge and also as a sub-set of traditional knowledge (Jain, 2008, UNEP, 2008). Averweg & Greyling (2010) defined IK as the "knowledge that an indigenous (local) community accumulates over time. This description of IK encompasses all forms of local knowledge acquired experientially – arts, languages, understanding, practices, technologies and beliefs –that enables a community to achieve stable livelihoods in its geographical residence". Thus, IK is culture-specific, dynamic, originates from age-old beliefs, traditions, experiences and observations. It is non-formal, orally transmitted and usually not documented. Indigenous knowledge falls under tacit knowledge, which is personal knowledge, hard to put into words and is expressed through action. It is not codified and it is not rules-based, hence, it is difficult to transfer. Ossai (2010) further avers that IK is essentially tacit knowledge. Since IK is personal in nature, it is hard to put into words and difficult to codify and transfer but expressed through action. For the purpose of this paper, IK is defined, as local knowledge based on a particular culture and community in Botswana, which is transmitted orally, through initiation and demonstration.

According to Cobo (2010), "Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system". It is a comprehensive definition of indigenous communities. Adopting the above definition, in this paper indigenous communities are referred to those people, who reside in Botswana; who hold knowledge that is unique to them and their territory; and who are the source of historical continuity by preserving, developing and transmitting it to future generation with the assistance of public librarians.

## **3. Background to Indigenous Knowledge in Botswana**

Like other African countries, Botswana has abundance of IK and public librarians are involved with indigenous community. As in other countries, Botswana's indigenous knowledge is derived from the cultural life of the local people and their experiences that have been passed from generation to generation. Indigenous knowledge systems revolve around local people's livelihoods in the areas of range management, crop production, handcraft production, fishing, wild plants, primary healthcare, and herbal medicines (Kgathi, Ngwenya, and Wilk, 2011). IK communities use IK systems for poverty alleviation through communal fields, work parties, and share cropping, storage and protection of seed products, food preparation for nutritional value. Indigenous communities in Botswana are highly dependent on natural resources for their livelihoods and use their indigenous knowledge to ensure sustainability of the natural resources. Local people are acquainted and adaptive to the environment to the extent of surviving floods, drought, livestock and human disease

outbreaks. IK communities use IK for livelihoods including “fishing, basket making, cultural tourism, conservation of natural resources, using mekoro/dugout canoes, water diving, and use of fire”(Kgathi, Ngwenya & Wilk, 2011:62). Like Ghana, knowledge of plants of indigenous people of Botswana has contributed to people’s livelihoods in many ways, such as determining the soil fertility for food production and conserving the environment. Traditional health practices are common in Botswana ranging from knowledge of medicinal plants to maturity; protection of adults from illness.

“There is a wealth of untapped indigenous knowledge in traditional Botswana society. There is a danger that this knowledge will be eroded with time or pirated and lost to the National System of Innovation in Botswana” (CSIR, 2005:12). Botswana is keen to develop its indigenous knowledge systems, which have been orally passed from generation to generation. Okore, Ekere & Eke (2009) state that developing countries are endowed with a wealth of indigenous knowledge but access to such knowledge is hampered by lack of an environment that permits free flow of ideas amongst members of the community. This statement by Okore, Ekere & Eke (2009) clearly suggest that libraries should facilitate the exchange and capturing of indigenous knowledge by providing favorable environment.

Recognizing the value of IK, Botswana Government has established the Department of Research, Science and Technology (DRST) under the Ministry of Infrastructure Science and Technology. The department is charged with the responsibility of carrying out research in indigenous knowledge systems (IKS) in the country (Joseph, 2010). The criteria of prioritising research area in indigenous knowledge was that “indigenous knowledge is recognised throughout the world as having the potential to contribute to human welfare. Botswana needs to protect its indigenous knowledge and harness it to the benefit of its citizens” (CSIR, 2005:76).

To support the nation-wide initiatives towards IKS, public libraries in Botswana are vigorously supporting indigenous community, which is the focus of this paper. For example, Kasane public library has initiated a project, “Memories of Old Kasane” to capture the oral history and other traditions of old Kasane. By doing so Kasane being one of the major tourist attraction centres in Botswana will attract and develop tourism in the country. Public libraries in Palapye under the “Old Palapye Ruin” collaborate with the indigenous community to collect, preserve and share Palapye’s ethnicity. In Kopong public library, librarians are involved in a “Sewing project” to empower indigenous women to generate income through the resources provided by the library such as, capacity building training and the sewing machines. In Molalatau the librarians collaborate with the indigenous community to create, document and publish indigenous language (Sebirwa) dictionary. In the Okavango region, librarians are collaborating to capture basket-weaving, a unique skill to indigenous people to teach to the young generation and preserve it for future generation. In Mankodi, indigenous community has discovered an indigenous plant, which is believed to have immense medicinal value. Librarians are actively participating with indigenous community in Mankodi in the exploitation and discovery of the plant to document and preserve this IK for current and future use. Some libraries for example the Gweta library, however just do storytelling, folklore and proverbs where an elderly person is invited to the library to come and tell children stories, folklore and proverbs. Unfortunately these stories are not written down or recorded for future use due to limited resources. This paper, was motivated in the above background.

**Purpose and objectives of the paper:** The purpose of this paper was to discuss and share how enthusiastically librarians in public libraries in Botswana are extending library services for the posterity of indigenous knowledge and indigenous communities and, for its improved accessibility. To accomplish this purpose, this small-scale study pursued the following three objectives:

- Identify, how libraries capture, store and preserve indigenous knowledge in public libraries in Botswana;
- Find-out how libraries make indigenous knowledge accessible to users; and,
- Determine whether librarians encounter any challenges in preservation and accessibility of indigenous knowledge or not.

#### **4. Public libraries in Botswana**

The public libraries are run by the Botswana National Library Service (BNLS) Headquarters situated in the capital city, Gaborone. The BNLS was established in September, 1967 by an Act of Parliament: National Library Service Act, No. 29 of the 1967. It was officially opened on 8th April, 1968. The BNLS is one of the departments of the Ministry of Youth, Sport and Culture. The National Library Services Board provided advises the minister on matters related to provision of library services in the country. The Director of BNLS is the Secretary to the Board (Botswana 1987: Chapter 58.02).

The BNLS started with one public library - the Gaborone Public Library on 1st April, 1968. In the past 48 years, BNLS has grown rapidly and extended its services to most parts of the country including all remote areas. Currently, BNLS runs 37 public libraries and some of the public libraries are extending their services to indigenous communities. Botswana has a well-developed modern telecommunications infrastructure, which remain underutilized (Sesigo Project, 2011). In Botswana public libraries, the development of ICT connectivity has been initiated through a collaborative partnership between the Sesigo Project, Ministry of Youth Sport and Culture (MYSC), the Bill & Melinda Gates Foundation and is coordinated by African Comprehensive HIV/AIDS Partnerships (ACHAP) (Sesigo Project, 2011) in establishing internet connected public libraries with computers. This study focused only at 4 public libraries including Kanye, Kasane, Molalatau and Palapye public libraries, which are most actively involved with indigenous community.

#### **5. Review of the Related Literature**

This section reviews the relevant literature on the research topic.

##### **5.1. Importance of IK for libraries and librarians**

Because of the skills and expertise to organize access, disseminate and facilitate engagement with information, librarians are best placed to manage and preserve indigenous knowledge. As noted by Nakata & Langton (2005:32), in August 2004, the Northern Territory Minister for Local Government, Mr John Ah Kit, made a statement to Parliament, “One of the aims of libraries is to preserve our Indigenous culture and encourage community development. A vital key to this is to increase opportunities for libraries in remote areas to assist in the development of information literacy and basic literacy skills”, which is true. Were (2015) considers African libraries as “goldmines in indigenous research and knowledge”. Public

libraries around the world, for example, Australia, India, South Africa, Zimbabwe are playing key role in managing IK. Greyling & Zulu (2010) believe that “A library with content of local relevance will encourage communities to make use of library services”, hence, Durban public libraries have initiated an indigenous digital library project and libraries are crowd sourcing to collect local IK. Libraries and related institutions in Zimbabwe play a critical role in collection and dissemination of IK. Zimbabwe has a well-developed library system with higher concentrations in urban areas, for example, the capital city itself has at least sixteen to eighteen public libraries (Chisita, 2011). Libraries are using social software technology and IK is preserved through establishing a community web portal using Web 2.0 technology. A memory database is embedded in the portal as a wiki allowing collaborative writing and sharing of content. In the long-term, this project aims African public libraries to become part of the global information society by establishing sustainable digital library services of local relevance (Greyling & Zulu, 2010:31).

The IFLA/UNESCO Public Library Manifesto (1994) describes the public library as the local center of information which provides access to all kinds of knowledge and information. It describes the role of the librarian as that of “an active intermediary between users and resources.” The Manifesto further notes that the library services and collections must include all types of appropriate media and modern technologies as well as traditional materials. Wendland (2007) further notes that libraries and archives as repositories of indigenous and other cultural materials, fulfil vital preservation, educational, scholarly and access functions for benefit of whole society.

On a similar note, Isah, Bashorun & Omopupa (2012), reiterate that traditionally, “libraries and archives are custodian of knowledge and cultural heritage; they hold drawings, paintings and other documentary artifacts, including manuscripts, records, books, audiovisual items, etc.”

IFLA (2014) recommends libraries and archives to:

- implement programs to collect, preserve and disseminate indigenous and local traditional knowledge resources;
- publicize the value, contribution, and importance of indigenous and local traditional knowledge to both non-indigenous and indigenous peoples;
- involve elders and communities in the production of IK resources; and,
- Encourage the recognition of principles of intellectual property to ensure the proper protection and use of IK.

Thus, increasingly, libraries are recognizing IK as an important source of developmental information.

## **5.2 Techniques to capture and preserve IK**

In Nigeria, indigenous knowledge is the unique, traditional, local knowledge existing within and developed around specific conditions of women and men indigenous to a particular geographic area including horns, drums, stories (Christopher, 2015). It is preserved by recording interviews of resource persons and create microfilm records and cameras are used to capture indigenous information and people buy indigenous materials to preserve them (Anyira, Onoriode & Nwabueze, 2010). In some notable communities of Nigeria, indigenous knowledge have been transferred “from one generation to the other through ancient drums, gongs, and storytelling” (Christopher, 2015:60). According to Okore, Ekere & Eke (2009)

indigenous knowledge preservation methods include documentation, digitization, video recording, and providing Internet access.

According to Okore, Ekere & Eke (2009) and Christopher (2015), libraries can facilitate preservation and promotion of indigenous knowledge in many ways for its increased accessibility including:

- Documenting IK stories by recording into audio tapes and videos;
- Publish IK into books or journals;
- Materials that cannot be preserved through documentation can be converted into artifacts to preserve;
- Libraries can also provide a current awareness service through mass education, where sons and daughters of a community can be taught knowledge of their forefathers indigenous to their community;
- Libraries can create an environment for face –to-face forums. For example, organize talk shows involving traditional rulers, elderly people and professionals in various vocations from different subject areas ranging from agriculture, ecosystem, medicine, conflict resolution. Information collected during these talks can be edited and made available in videos, CDs or DVD.
- Libraries can also sponsor competitions on documentary of indigenous technology, traditional songs and cultural attire. Entries can be made in audio, video or print format and this collection of indigenous knowledge made during such activities could be processed and made accessible to users of the library.
- Libraries can partner with library schools to create indigenous knowledge collection which can be edited and made accessible to people; and,
- Libraries can invite adults to tell stories to children about their community in the library to document IK and the adults could also teach dance steps, enact plays and dramas explaining IK of a particular community (Okore, Ekere & Eke, 2009; Christopher, 2015).

Thus, there are several techniques; audio-tapes, CDs, books, journals, artefacts, talk shows, story-telling and most recent web-based platforms, that can be used and already being used by many libraries in order to capture, preserve and to make IK more accessible.

### **5.3 Documentation of Indigenous Knowledge**

Documentation is the most used method of indigenous knowledge preservation. According to WIPO (2011), documenting traditional knowledge and traditional cultural expressions may serve five valuable purposes: safeguarding and preservation for future generation; protection of secret and sacred records; use of traditional cultural knowledge databases for research and development; prevent its misappropriation through the erroneous granting of patents; and, it provides positive protection, enabling customary holders to benefit from their traditional and cultural knowledge in dealings with third parties. By virtue of their skills and competencies librarians can play key role in IK management. Traditionally, librarians did not focus on IK management, however, “libraries and information professionals can play an important role in assisting indigenous communities with the management and preservation of traditional knowledge through providing resources and expertise in collection, organization, storage and retrieval” (Stevens, 2008: 25). Therefore, librarians and libraries can facilitate documentation of IK to safeguard, preserve and prevent misuse and misappropriation of it. Hence, Ebijawa

(2015:3) emphasises that “IK practitioners and library and information managers are important professionals in local knowledge documentation for posterity”.

#### **5.4 Techniques to disseminate indigenous knowledge**

Zimbabwe has two television channels and four radio stations which broadcast to the nation in the official as well as indigenous languages (Chisita, 2011). This is supported by Anyira, Onoriode & Nwabueze (2010) study in Nigeria, where participants felt that television and radio broadcasting will make IK accessible to indigenous people, while nearly all also agreed that mobile library services, films, exhibitions, outreach services, lending of IK materials, online access to IK, and repackaging of IK by the library will facilitate access to indigenous knowledge (Anyira, Onoriode & Nwabueze, 2010). Today Social media technologies have changed the ways, people communicate and access information and knowledge at any time from anywhere they want. Social media applications provide great opportunities to librarians for creating, managing, preserving, and sharing of indigenous knowledge. Already, there are initiatives in Africa that use Web 2.0 technologies. In South Africa the Ulwazi Programme is the first digital library aimed at collecting and sharing indigenous knowledge and local history and culture. This programme is a project of eThekweni Municipality Libraries and Heritage Department which is managed by AdNotes Digital. The Ulwazi Programme collects and shares local knowledge and histories in the form of a 'wiki', a website. Web 2.0 technologies, such as, a blog, a Flickr group, a Vimeo Channel and a Twitter account enable collaboration at all levels in the building up of the database. The library acts as moderator and custodian of the online indigenous knowledge resource (ULWAZI, n.d.). To summarise, librarians are using several techniques to disseminate IK; radio, T.V. mobile library services, films, exhibitions, outreach services and Web 2.0 and Social Media applications. Hence, Owiny, Mehta & Marezki (2014) propose the use of social media and mobile technologies in the creation, preservation, and dissemination of indigenous knowledge to reach a wider audience.

#### **5.5 Issues and challenges in IK documentation**

When documenting indigenous knowledge, it is important for librarians to understand and consider issues and challenges that are associated with its documentation. Some of the major issues are:

- **Identity of indigenous people/community:** In documenting indigenous knowledge it is very important to recognize and maintain the identity of indigenous community. According to Okore, Ekere & Eke (2009), libraries that manage indigenous knowledge should not perceive themselves as the owners of such knowledge but rather the custodians of it. On a similar note, when digitizing indigenous material, it is vital for libraries to consider “whether or not to digitize the culture or history of a community, one should ask whether the creation of these collections will assist in the process of strengthening the identities of the communities” (Stevens, 2008: 27). Indeed, IK Communities have the rights to own and control their indigenous knowledge. Once the IK is passed to librarians or any other outsiders without establishing proper ownership rights, it becomes difficult for the IK community to control how the knowledge is used; and, how and who else can acquire it. Indigenous knowledge is “commonly held by communities and is to be used for its benefit. Therefore to document and use this knowledge, permission must be sought in a way



that is reciprocal with and reflective of the will of the communities.” (Ebijuwa, 2015:7). Despite several benefits, documenting indigenous knowledge remains a controversial venture particularly from the perspective of indigenous peoples and local communities.

- **Accessibility of indigenous knowledge:** It is not adequate if the indigenous knowledge exists, the accessibility and usage of the existing indigenous knowledge is imperative. As rightly observed by (Okore, Ekere & Eke, 2009), there is so much indigenous knowledge in different indigenous communities of the developing world, the availability of such knowledge does not mean its accessibility or use. As discussed earlier, Okore, Ekere & Eke (2009) have suggested a number of ways, how libraries can promote access to indigenous knowledge by creating an environment supportive for face-to-face interaction between IK community and other community members to discuss issues that are useful to the community. Stevens (2008: 29) elaborates the issue of accessibility, benefits and recognition of IK community with an appropriate example, “sometime IK communities may wish to record indigenous knowledge related to plants so that pharmaceutical companies that use these plants for product development will recognize prior use by indigenous communities and benefit them accordingly”. It is therefore, important to make IK accessible with appropriate safeguard.
- **Storage medium:** Storage medium can be another issue related to documentation and accessibility of indigenous knowledge especially digitization of IK. Indigenous knowledge users in IK communities may have limited computer literacy so search interfaces should be simple and should allow users to search and browse using graphics and other non-text-based features (Stevens, 2008).

**Challenges for librarians:** The literature reveals numerous challenges that librarians encounter in managing, preserving and dissemination of indigenous knowledge. The major challenges are:

- *Tacit nature of indigenous knowledge:* Since IK is mostly tacit and embedded in a particular community practices and experiences, it is a challenge in itself to record, manage and disseminate it. According to Makinde & Shorunk (2013), indigenous knowledge is individually based, which makes it difficult to document and communicate it to other people.
- *Copyright and intellectual Property rights:* IK poses serious challenges related to copyright and intellectual property right in the collection, preservation and provision of access to IK (Okore, Ekere & Eke, 2009; Anyira, Onoriode & Nwabueze, 2010; Adeniyi & Subair, 2013). Web-based management, storage and dissemination of indigenous knowledge has made the issues of copyright and intellectual Property rights more complex and challenging. Sometimes, it is difficult to establish the ownership of indigenous knowledge.
- *Inadequate funding:* Lack of adequate funding hinders librarians’ efforts to manage IK (Okore, Ekere & Eke, 2009; Anyira, Onoriode & Nwabueze, 2010), which has bearing on inadequate infrastructure and training.

- *Librarians' poor attitude towards IK:* There is empirical evidence that librarians' poor attitude towards IK challenges the management of IK. For example, the management of IK in Niger Delta libraries is ineffective because it is not taken seriously in Niger Delta libraries (Anyira, Onoriode & Nwabueze, 2010; Adeniyi & Subair, 2013).
- *Competition between traditional and new structures:* It is a challenge for librarians to afford and adopt new technology-based structures, such as tele-centers, which are becoming important platforms for capturing, transferring and giving access to IK (Okore, Ekere & Eke, 2009).
- *Inadequate infrastructure:* Lack of basic equipment for preservation and dissemination of indigenous knowledge is a serious challenge (Anyira, Onoriode & Nwabueze, 2010).
- *Time consuming:* Generally, IK is assumed as technically easy, yet it can be laborious, time consuming, costly and sometimes disappointing (Anyira, Onoriode & Nwabueze, 2010; Makinde & Shorunk, 2013) and thus it poses a challenge.
- *Insufficient staffing:* Staffing challenge is well-known issue in libraries especially in African countries, which limits librarians' involvement with IK (Anyira, Onoriode & Nwabueze, 2010) as librarians have several other commitments related to provision of information services to their clients.
- *Language challenge:* There are language barriers between indigenous communities and librarians to communicate in a common language. Documentation and communication of IK in languages understood by other community members is another important challenge (Anyira, Onoriode & Nwabueze, 2010).
- *Scientific validation:* Scientific validation is another challenge with IK, since IK is based on generations' long experience and it is not tested in laboratories like scientific knowledge (Kashweka & Akakandelwa, 2008).
- *Knowledge is power syndrome & lack of cooperation from local communities:* Because IK is a source of status and income for indigenous people, they are always secretive and often suspicious and afraid of documenting IK outside their customary oral exchange. They fear that if it is documented, it will be misused or stolen or even used against them and they may not be able to claim it, thereby rendering them powerless (Makinde & Shorunk, 2013). This is a challenge for librarians. Because of knowledge is power syndrome, sometimes indigenous people are reluctant to share their tacit knowledge with others (Okore, Ekere & Eke, 2009; Anyira, Onoriode & Nwabueze, 2010, Adeniyi & Subair, 2013; Ebijuwa, 2015), which makes it difficult for librarians to capture and document IK.
- **Disappearance of traditional knowledge and skills:** Another challenge is loss of indigenous knowledge and skills due to memory loss or death of elders and the deliberate or inadvertent destruction of indigenous knowledge (Owiny, Mehta & Marezki, 2014).

## 6. Research Methodology

The paper used a qualitative approach. The primary data was collected through interviews with the librarians, who are carrying-out indigenous knowledge management projects in public libraries in Botswana. The secondary data was collected through in-depth desk-top review of literature.

**Population of the Study:** This study is a case study of four public libraries: Kanye, Kasane, Molalatau and Palapye; the population of the study included four librarians of the selected four public libraries in Botswana.

**Data Analysis:** Qualitative data was collected through interviews. Thematic analysis approach was used for the analysis of interviews and by grouping responses into themes based on three research objectives.

**Ethical Consideration:** Prior to carry-out interviews, the permission to conduct interviews and present the findings at IFLA International conference was sought from the Botswana National Library Service (BNLS) headquarters and all the participating librarians. Anonymity was guaranteed to all the participating librarians; hence no librarian's name is disclosed in the paper.

## 7. Findings of the Study

As mentioned earlier, data was collected using interview technique. All the interviewees were asked three questions on capturing, storage and preservation of IK; accessibility of IK to user community; and, whether librarians face any challenges in capturing, preserving and make indigenous knowledge accessible to users. Findings of the study are presented according to three objectives:

**7.1 Capturing, storing and Preserving Indigenous knowledge by selected public libraries in Botswana:** The first research question sought to determine the activities undertaken by four public libraries in Botswana in order to capture, preserve and manage indigenous knowledge. Some libraries capture indigenous knowledge by use of video cameras and tape recorders. They interview elders on different aspects of their history; their origins, ways of living and sometimes riddles and traditional games and record the feedback. So far libraries which have made good efforts in managing indigenous knowledge are: Kanye, Kasane, Molalatau and Palapye. The Kanye Public library invites community elders to the library, interviews them, and writes down obtained information to share with the rest of the community at Kgotla meetings and when they come to the library (Interview with Respondent W, 2016).

In Kasane, the Kasane public library has embarked on a project that aims at tracing back the origins of the people of Kasane, the village itself and how it transformed into a tourist town. This information is then uploaded into the computer and saved on CDs to be shared with the lodges and hotels to be accessed by the tourists. The packaged information can also be accessed through the Kasane library blog at [kasanelibrary.blog.spot.com](http://kasanelibrary.blog.spot.com). Further the library embarks on a youth project and expands library services beyond the normal information provision by magnifying their services into a business centre. In this project, librarians mentor the youth and encourage them to be self-reliant by linking them with business

companies and intercedes with Citizen Entrepreneurial Development Agency (CEDA) on their behalf. This project has proved very useful. Librarians are not only able to provide information to their users, they have also been able to assist their users especially the youth in finding employment. Some are able to start up their small businesses as entrepreneurs through the assistance of the public library (Interview with Respondent X, 2016).

Molalatau is another library in Botswana that has gone beyond its traditional library services to capture and document the history of the Babirwa, a very unique and rare group of the Batswana. This library has ventured into a project that has seen them create a Sebirwa dictionary for other Batswana groups to appreciate this ethnic group. Librarians use Information communication technologies to store this information and to enable their users to access it throughout the day without any limitations. The soft copies of this dictionary are available through the computers in the library (Interview with Respondent Y, 2016).

As mentioned earlier, Public library in Palapye is actively involved with indigenous people. Under the “Old Palapye Ruin” librarians collaborate with the indigenous community to collect, preserve and share Palapye’s ethnicity in order to understand their community to provide them better library services. In Palapye public library, indigenous knowledge is captured using the Botswana Television cameras and sound recorders to be uploaded on computers, to be accessed by the library users at a later time. This has proved to be a very useful exercise as it encourages collaboration between other sectors outside of the library such as the media and the community itself. A library committee comprising of different sectors of the community is usually established to ensure inclusiveness of all stakeholders (media, museum, Botswana tourism authority, the chief of the village, village elders etc.) in order to capture information and ensure that the services of the public library are expanded to reach even the common man within the community (Interview with Respondent Z, 2016).

## **7.2 Accessibility of IK in selected public libraries in Botswana**

The findings of this study reveal two major ways of providing access to indigenous knowledge: face to face forums and through ICTs in the form of computers and CDs. The libraries which have been able to record or write some form of indigenous knowledge are able to provide the recorded information whenever they are required to. For instance in Kanye the information is disseminated through announcements by the Chief at Kgotla meetings, the librarian undertaking outreach activities going out of the library space to inform the community of the availability of this special information. Further, the library deposits a soft copy of these documentations with the national archives and records management unit and national museum to provide access of IK to the public (Interview with Respondent W, 2016).

At the Kasane library, librarians upload their compiled documentation into the computers and saved on CDs to be shared with the lodges and hotels to be accessed by tourists. The packaged information can be accessed through the Kasane library blog at [kasanelibrary.blog.spot.com](http://kasanelibrary.blog.spot.com). (Interview with Respondent X, 2016).

In Molalatau public library, the librarian in collaboration with the library working committee upload this valuable information into library computer provided by the Sesigo project for an easy access by the members of the public (Interview with Respondent Y, 2016).

In Palapye, the village elders in partnership with the librarian engage the chief, whenever they have a Kgotla meeting to inform the public about the developments in the village (Interview with Respondent Z, 2016).

### 7.3 Challenges in Botswana Public Libraries

Like other libraries in Africa, public libraries in Botswana encounter the following challenges:

- **Lack of Storage facilities:** There is a serious lack of storage facility to store audio-visual materials featuring indigenous knowledge, such as, DVDs, CDs, films etc.
- **Unwillingness to disclose cultural information:** Often indigenous people are not willing to disclose cultural information hence, this is posing a challenge for the librarian to capture and preserve IK.
- **Inadequate Infrastructure:** The public library do not have sufficient space, where one can comfortably seat and view the videos on IK without disturbing other library users. Often, libraries do not have adequate equipment, such as, video camera and tape recorders to capture indigenous knowledge are not provided and mostly public libraries have to rely on other stakeholders for necessary equipment.
- **Lack of funds:** Public libraries do not have sufficient funds to complete some partially completed projects on IK, such as unable to complete editing videos and consolidate them into a one complete film.
- **Low spirit of volunteerism:** Spirit of volunteerism among indigenous people is slowly dying; hence people need to be paid for their skills/ input of Indigenous knowledge in order to encourage indigenous people to come forward to share their knowledge.

## 8. Discussion

The findings from the interviews reveal some good and innovative initiatives by public librarians in Botswana to preserve, document and disseminate indigenous culture for community development as one of the critical roles of the public/community libraries. It is evident that the most common way of capturing the indigenous knowledge is through face to face forums and creation of networks with the community leadership and using modern technologies. However, despite the willingness of the librarians to capture and document indigenous knowledge, there are challenges such as, lack of appropriate equipment to capture indigenous knowledge and lack of sufficient funds to complete some partially implemented projects on IK (editing videos and consolidating them into a one complete film). Nonetheless, these challenges are not unique to Botswana libraries as they are also experienced by other libraries. Inadequate funding, poor infrastructure and librarians' poor attitude and lack of

cooperation by indigenous communities are well-cited challenges in Nigerian libraries (Okore, Ekere & Eke, 2009; Anyira, Onoriode & Nwabueze, 2010; Adeniyi & Subair, 2013).

However, libraries and archives as part of the superstructure need to “reassert cultural integrity, cultural authority, and preservation of context, cultural sovereignty and respect” (Wendland, 2007). Another important finding of the study is that librarians are making a concerted effort to be inclusive of all members of the community involving representatives outside of the library field such as, people from the media, the archivists, photographers, people from the museum, chiefs, village elders, the young and the old. Libraries should therefore, seize this opportunity to reposition themselves within the community and engage to the fullest with all interested parties, who are also sources of indigenous knowledge. For example, in Palapye, the library has made attempts to capture the indigenous knowledge of the people of Palapye, but the challenge is that they keep losing some of the important people in this exercise like the chief’s death. It is therefore, imperative that libraries should be more proactive in capturing and preserving indigenous knowledge for the future of the nation.

## 9. Conclusion

It is evident from the foregoing that public libraries in Botswana have initiated a good number of projects to capture, preserve and manage indigenous knowledge for the posterity of indigenous knowledge and indigenous community. It is only through preservation, indigenous knowledge can be accessed by future generations. In this way, indigenous people and their knowledge will be remembered and kept alive by their descendants for generations to come. Botswana public libraries’ initiatives seem to reflect, what the former President of the Republic of Botswana, Sir Seretse Khama had once stated, “A nation without a past is a lost nation, and a people without a past are a people without a soul.” The above statement emphasizes that if valuable national resources, such as indigenous knowledge are not preserved for future generations; nations are more likely to lose their integrity, human evolution and cultural and historic values. Hence, it is vital preserve IK for posterity and librarians have key role to play in it. Libraries are no longer seen as important as traditional libraries because most of the services they provide can be sought from anywhere any times using the Internet facilities. To remain relevant, they need to perceive their roles as managers and promoters of IK. This paper concludes with Ebijuwa’s (2015:8) closing remarks, “libraries should look beyond collection development and show the need for a service which is more relevant to indigenous communities”.

## 10. Recommendations

Based on the findings and the existing literature the authors put forward the following recommendations for libraries and librarians:

- **Proactive Attitude:** Bearing in mind the crucial role a library can play in the development of the community, this paper recommends that public libraries should play a more proactive role in the preservation and documentation of indigenous knowledge. Chisita (2011:9) has rightly voiced, “Libraries need to be proactive and promote community publishing, so that communities are able to document their experiences and market as well as share with others”.
- **IK as one of the top priority:** Libraries and librarians should see the management of IK as one of their top priorities and should collaborate with indigenous people to acquire, store, and make IK accessible.

- **Increased Access through Internet:** Efforts should be made to collect and package IK to make it available on the Internet to provide the members of public limitless access to IK as reinforced by Owiny, Mehta & Maretzki (2014), libraries and other information centres could also post audio feeds or videos of indigenous knowledge on the social media and communication technologies available in a particular community. Of course, this would require librarians to understand and adhere intellectual property rights and copyright issues.
- **Support from Government:** The support of government and corporate organizations is vital for the preservation and accessibility of IK and it is also essential for the sustainability of any IK initiative. Anyira, Onoriode & Nwabueze (2010:8) have appropriately suggested, “Government and corporate organizations should collaborate with libraries by providing fund for of preservation and accessibility of IK. Copyright issues should be properly sorted out before embarking on any collaboration agreement”.
- **Encourage local Content:** This research recommends that librarians be encouraged to develop locally produced materials to provide access to relevant reading and audio materials to the communities, they serve. This will not only empower local communities but it will go a long way in the development of local communities and through them the nation at large.
- **Adequate facilities:** Libraries should be provided with adequate budget to facilitate capturing and preserving IK such as, cameras, tape and video recorders, transport, DVDs and also to afford facilities for proper and effective documentation and access to the sources of IK in all public libraries.
- **Strong collaborative partnerships with local communities:** There is a need for strong collaboration between librarians and indigenous communities in order to motivate indigenous communities to volunteer for sharing their indigenous knowledge.
- **Recognition of IK communities:** In view of the fact that not many people are forthcoming when approached for interviews on capturing and documenting IK, it is strongly recommended that the few who are forthcoming should be recognised.

**Contribution of the paper:** Although the paper is based on research in Botswana public libraries, it can be useful for other libraries around the world with similar library environment.

**Further Research:** This study was limited to four public libraries in Botswana. It is suggested that further research should be carried out in all public libraries in Botswana to get a comprehensive picture of librarians’ involvement with indigenous communities. This would contribute to community and economic development and stimulate and inspire all public libraries and librarians to be involved in indigenous communities in their library services.

## References

Interview with respondent W at Kanye Public Library on 3 May 2016

Interview with respondent X at Kasane Public Library on 3 May 2016

Interview with respondent Y at Molalatau Public Library on 4 May 2016

Interview with respondent Z at Palapye Public Library on 4 May 2016

Adeniyi, I.A. & Subair, R.E. (2013). Accessing Indigenous Knowledge Resources in Libraries and the Problems Encountered by Librarians Managing IK in Oyo State, Nigeria. *Library Philosophy and Practice* (e-journal). Paper 1988. [Online]. Available at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2391&context=libphilprac>, Accessed on 16 April 2016.

Anyira, I.; Onoriode, O.K. & Nwabueze, A. (2010). The Role of Libraries in the Preservation and Accessibility of Indigenous Knowledge in the Niger Delta Region of Nigeria. *Library Philosophy and Practice*, ISSN 1522-0222, [Online]. Available at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1400&context=libphilprac>, Accessed on 24 April 2016.

Averweg, U.R. & Greyling, E.H. (2010). Some challenges for Information and Communication Technologies in Indigenous Knowledge preservation. [Online]. Available at: <http://www.ulwazi.org/docs/Averweg%20and%20Greyling%2010th%20June%202010.pdf>, Accessed on 17 April 2016.

Botswana. 1987. The laws of Botswana. Botswana National Library Service, Chapter 58:02. Gaborone.

CEFIKS (The Center for Indigenous Knowledge Systems). (2010). Welcome to the Centre For Indigenous Knowledge Systems. [Online]. Available at: <http://www.cfiks.org/> Accessed on 16 April 2016.

Chabalala, H. (2008). African Traditional Medicines: The Role of Indigenous Knowledge Systems in Bioprospecting and Product Development in South Africa. Available at: <http://www.scribd.com/doc/12529434/African-Traditional-Medicines-The-Role-of-Indigenous-Knowledge-Systems-in-Bioprospecting-and-Product-Development-in-South-Africa-by-HLUPHEKA-CHABALAL>

Chisita, C.T. (2011). Role of libraries in promoting the dissemination and documentation of indigenous agricultural information: Case Study of Zimbabwe. [Online]. <http://www.ifla.org/past-wlic/2011/78-chisita-en.pdf>, Accessed on 16 April 2016, Accessed on 24 April 2016.

Christopher, O.O. (2015). Indigenous knowledge storage and access for cultural continuity: the role of the library in Nigeria. *International Journal of Innovative and Applied Research*, 3(1): 59- 63.



Cobo, J. R. M. (2010). Definition of indigenous peoples. [Online]. Available at: <http://indigenouspeoples.nl/indigenous-peoples/definition-indigenous>

CSIR (2005). Botswana National Research, Science and Technology Plan: Final Report. [Online]. Available at: [http://www.researchictafrica.net/countries/botswana/BNRST\\_Final\\_Report\\_2005.pdf](http://www.researchictafrica.net/countries/botswana/BNRST_Final_Report_2005.pdf), Accessed on 23 April 2016.

Dhewa, C. (2011). Modern science needs traditional knowledge. [Online]. Available at: <http://www.scidev.net/en/opinions/modern-science-needs-traditional-knowledge-1.html>, Accessed on 17 April 2016.

Ebijuwa, A. S. (2015). Management of indigenous knowledge in primary healthcare: Bridging the gap between library and alternative healthcare practitioner in Nigeria. [Online]. Available at: <http://library.ifla.org/1145/1/168-ebijuwa-en.pdf>, Accessed on 10 April 2016.

Greyling, E. & Zulu, S. (2010). Content development in an indigenous digital library: A case study in community participation. *International Federation of Library Associations and Institutions (IFLA) Journal*, 36 (1): 30-39.

Gudhlanga, E.S. & Sukutai, G.M. (2012). Indigenous knowledge systems: Confirming a legacy of civilisation and culture on the African continent. *Prime Journal of Social Science (PJSS)*, ISSN: 2315-5051. 1(4): 72-77.

IFLA (2014). IFLA Statement on Indigenous Traditional Knowledge. [Online]. Available at: <http://www.ifla.org/publications/ifla-statement-on-indigenous-traditional-knowledge>, Accessed on 23 April 2016.

IFLA/UNESCO Public Library Manifesto (1994). [Online]. Available at: <http://www.ifla.org/publications/iflaunesco-public-library-manifesto-1994>, Accessed on 12 April 2016.

IIM (Indian Institute of Management). (2015). Third International Conference on Creativity and Innovations of Grassroots. [Online]. Available at: <http://www.iccig.org/pdf/abstract-Book-ICCIG-III.pdf>, Accessed on 10 April 2016.

Isah, A.; Bashorun, M.T.; & Omopupa, K.T. (2012). Libraries and Preservation of Indigenous Knowledge in Developing Countries: The Nigeria Experience. In *Library and Information Science in Developing Countries: Contemporary Issues*. Edited by, Adeyinka Tella, Abdulwahab Olanrewaju Issa.

Jain, Priti (2008). Indigenous Knowledge Systems, in Africa in Information and Knowledge Management in the Digital Age: Concepts, Technologies and African Perspectives. Third World Information Services Limited, Ibadan: Nigeria. ISBN: 978-978-084-723-4, pp. 300-331.

Joseph, B.K. (2010). Towards a Knowledge-Based Economy – the Case of Botswana A Discussion Article. *International Journal of Sociotechnology and Knowledge Development*, 2 (2): 53-62.

Kashweka, K. and Akakandelwa, A. (2008). Indigenous Knowledge and the attainment of MDGs in Africa: opportunities and challenges. Proceedings of the 18th Standing Conference of Eastern, Central and Southern African Library Associations. 15th -18th July, 2008, Lusaka, Zambia

Kgathi, D. L.; Ngwenya, B.N. & Wilk, J. (2011). Shocks and Rural Livelihoods in The Okavango Delta, Botswana pp. 55-74, **in** Rural Livelihoods, Risk and Political Economy of Access to Natural Resources in the Okavango Delta, Botswana, edited by D.L. Kgathi, B. N. Ngwenya and M.B. K. Darkoh.

Makinde, O. O. & Shorunke, O.A. (2013). Exploiting the values of indigenous knowledge in attaining sustainable development in Nigeria: The place of library. [Online]. Available at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2185&context=libphilprac>, Accessed on 17 April 2016.

Nakata, M. & Langton, M. (2005). Australian Indigenous Knowledge and Libraries. *Australian Academic & Research Libraries*, 36(2): 1-211. [Online]. Available at: [http://www.alia.org.au/publishing/aarl/AARL\\_vol36\\_no2\\_2005\\_reprint.pdf](http://www.alia.org.au/publishing/aarl/AARL_vol36_no2_2005_reprint.pdf), Accessed on 9 April 2016.

Okore, A.M., Ekere, J.N. and Eke, H.N. (2009). Promoting access to indigenous knowledge in digitize age: Libraries as facilitators. Libraries Create Future: A paper presented at the Nigerian Libraries Association 47th Annual General Conference 2009, Ibadan, Oyo State, from 26-31 July 2009.

Ossai, N.B. (2010). African Indigenous Knowledge Systems (AIKS). *Symbiosis* ISSN: 1548-3436, 7 (2), [Online]. Available at: <http://ojs.uprrp.edu/index.php/symbiosis/article/viewFile/161/95>, Accessed on 10 April 2016.

Owiny, S.A.; Mehta, K; & Maretzki, A.N. (2014). The Use of Social Media Technologies to Create, Preserve, and Disseminate Indigenous Knowledge and Skills to Communities in East Africa. [Online]. Available at: <http://ijoc.org/index.php/ijoc/article/viewFile/1667/1067>, Accessed on 17 April 2016.

SESIGO PROJECT (2011). The makings of a Botswana information society through access to information communications technologies. [Online]. Available at: [http://www.sesigo.org.bw/assets/files/sesigo\\_project.pdf](http://www.sesigo.org.bw/assets/files/sesigo_project.pdf), Accessed on 24 April 2016.

SRISTI (2016). Society for Research and Initiatives for Sustainable Technologies and Institutions. [Online]. Available at: <http://www.sristi.org/cms/>, Accessed on 23 April 2016.

Stevens, A. (2008): A different way of knowing: Tools and strategies for managing indigenous knowledge. *Libri* (58): 25-33.

ULWAZI (n.d.). ULWAZI sharing Indigenous Knowledge. [Online]. Available at: [http://ulwazi.org/index.php/Ulwazi>About#Role\\_of\\_the\\_eThekwini\\_Public\\_Library](http://ulwazi.org/index.php/Ulwazi>About#Role_of_the_eThekwini_Public_Library), Accessed on 21 April 2016.

UNEP (United Nations Environment Programme) (2008). Indigenous knowledge in disaster management in Africa. [Online]. Available at: <http://www.unep.org/IK/PDF/IndigenousBooklet.pdf>, Accessed on 17 April 2016.

Wendland, W. (2007). Intellectual Property and Traditional Cultural expressions and Traditional knowledge: Key Issues. [Online]. Available at: <http://archive.ifla.org/IV/ifla73/papers/095-Wendland-en.pdf>  
Accessed on 19 April 2016.

Were, J. (2015). Women in Tech: Rebuilding the link between librarians and farmers. [Online]. Available at: <http://ictupdate.cta.int/en/Feature-Articles/Women-in-Tech-Rebuilding-the-link-between-librarians-and-farmers> Accessed on 20 April 2016.

WIPO (2011). Document of WIPO (2011). Traditional Knowledge and Traditional Cultural Expressions. [Online]. Available at: [http://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_tk\\_9.pdf](http://www.wipo.int/edocs/pubdocs/en/wipo_pub_tk_9.pdf), Accessed on 16 April 2016.

WSIS (World Summit on the Information Society). (2013). WSIS Forum 2013 13-17 May, Geneva. [Online]. Available at: <http://www.itu.int/net/wsis/implementation/2013/forum/>, Accessed on 24 April 2016.