

Documentation and Protection Practices of Indigenous Health Knowledge among Traditional Medical Health Practitioners in Kenya

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DOI: <https://doi.org/10.36348/sjhss.2026.v11i09.010>

| Received: 18.07.2026 | Accepted: 12.09.2026 | Published: 21.09.2026

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Abstract

The purpose of this study was to examine methods used to document and protect indigenous health knowledge among traditional medical health practitioners (TMHPs) in Kenya and to strengthen its sustainable management. The objectives were to: determine methods used by TMHPs to protect and document traditional indigenous health knowledge; assess the effectiveness of existing protocols in protecting and documenting traditional health knowledge; examine challenges faced by TMHPs in protecting and documenting traditional health knowledge and suggest effective strategies for protecting and documenting traditional health knowledge. Guided by the SECI model and Social Exchange Theory, this qualitative case study involved 30 traditional medical registered practitioners and 7 key informants. Data was collected through interviews and observations and analyzed thematically. The findings reveal that documentation is largely informal, oral and practitioner-controlled, while protection relies on secrecy and restricted sharing within trusted networks due to fears of exploitation and loss of ownership. Documentation remained largely informal, oral, and practitioner-controlled, while protection relied on secrecy, custodianship, and restricted sharing owing to concerns about misuse, loss of ownership and livelihood security. Existing documentation and protection mechanisms were perceived as ineffective because formal documentation and protection systems remained poorly aligned with indigenous practices and were weakly implemented. The study concludes that the protection of indigenous health knowledge is severely hindered by this systemic misalignment between formal frameworks and traditional practices. To address these gaps, the study recommends developing hybrid documentation systems that integrate formal protection mechanisms with indigenous knowledge structures to ensure both preservation and livelihood security.

Keywords: Documentation, Indigenous knowledge, Kenya, Knowledge management traditional health knowledge, Knowledge protection, Traditional Medical Health Practitioners.

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INTRODUCTION

Health systems worldwide are influenced by complex interactions among social, cultural, economic, and institutional factors. In this context, traditional medicine (TM) continues to play an important role, especially in developing regions where access to biomedical healthcare is limited.

Despite its importance, indigenous knowledge especially in health faces growing threats. Since this knowledge mostly tacit and experience-based form of knowing, it is often undocumented and deeply rooted in individuals and communities, making it vulnerable to loss, distortion, and misappropriation (Girard & Girard, 2015; Mpilo & Chauke, 2025). Modern pressures, such as globalization, urbanization, and shifting socio-cultural dynamics, have further sped up the decline of traditional

knowledge systems. The methods for the documentation are still unstructured and lack legal frameworks. There is a growing concern among the TMHPs that having structured and legally recognized methods of documenting and protecting indigenous traditional health knowledge will put their practice in jeopardy thus denying them their economic livelihood.

This study was conducted in western Kenya specifically Bungoma and Kakamega counties among registered traditional medical practitioners, within a context where indigenous medical knowledge is largely transmitted orally and concerns over misappropriation limit its documentation. The study excluded the unregistered TMHPs because of legitimacy arising from their practice by the Kenyan government. Although the study was conducted among the TMHPs in the two

counties, the findings could be generalized on the traditional practices in Kenya. The practices have been passed down the generations by apprenticeship. Herbal medicines are the core of traditional medicine, as they are native to a particular community, country or culture (WHO, 2019). Herbal medicines include herbs or minerals used for their therapeutic benefit (WHO, 2019). In Kenya, traditional medicine functions within a pluralistic healthcare system where biomedical and indigenous methods coexist and often complement each other. Traditional health practitioners are essential in this system, especially in rural and underserved areas with limited formal healthcare infrastructure. Their continued importance is not only due to accessibility and affordability but also because they align with culturally rooted understandings of health, illness, and healing (Mutombo *et al.*, 2023; Ngere *et al.*, 2022).

The practice of traditional medicine in Kenya is deeply rooted in indigenous knowledge systems shaped by local ecological resources, cultural beliefs, and community norms. These systems include various forms of knowledge, such as ethnobotanical skills, spiritual healing methods, and socially based diagnostic approaches. Significantly, the legitimacy and authority of traditional health practitioners are closely tied to their expertise and guardianship of this knowledge, which is usually gained through apprenticeship, lineage, or spiritual calling.

Cultural practices such as secrecy, restricted knowledge sharing, and custodianship serve a dual purpose in this context. While they act as methods for protecting knowledge from misuse and exploitation, they also restrict opportunities for formal documentation and wider dissemination (Shiva, 2016; Smith, 2021). Therefore, the processes of documentation and protection are inherently interconnected and context-dependent.

Furthermore, protecting indigenous knowledge adds more complexity. Unlike traditional knowledge systems managed by individual intellectual property rights, indigenous knowledge is typically collectively owned and governed by community rules and protocols (World Intellectual Property Organization, 2025). This has generated growing scholarly and policy attention to concepts such as indigenous data sovereignty, which highlight communities' rights to control access to, use of, and benefits from their knowledge systems (Carroll *et al.*, 2020).

However, the management of traditional indigenous health knowledge in Kenya faces significant structural and institutional challenges. Knowledge transfer remains mainly informal and oral, limiting systematic documentation and increasing the risk of knowledge loss, especially during generational shifts (Carroll *et al.*, 2020; Shiva, 2016). Additionally,

culturally rooted norms of secrecy and restricted knowledge sharing, while vital for protecting knowledge integrity, hinder efforts to formalize and expand access (Kukutai & Taylor, 2016; Smith, 2021).

From a regulatory perspective, the governance of traditional medicine and indigenous knowledge in Kenya remains scattered. Existing laws, such as those under the Pharmacy and Poisons Act (Cap 244), primarily regulate medicinal products rather than protect the underlying knowledge systems (Sifuna, 2022). This results in gaps regarding intellectual property rights, benefit sharing, and recognition of community-based knowledge ownership.

Institutional efforts to integrate traditional medicine into formal healthcare systems, including initiatives supported by the Kenya Medical Research Institute and policy guidance from the World Health Organization's Traditional Medicine Strategy, have increased recognition of traditional practices. However, these efforts have not sufficiently addressed the documentation and protection of indigenous health knowledge at the practitioner level, where such knowledge is created, maintained, and used.

However, despite the central role of traditional medicine in Kenya's healthcare system and the recognized value of indigenous knowledge systems, there is a significant gap in systematic, evidence-based information on how traditional health practitioners share, document and manage indigenous knowledge, especially among registered traditional health practitioners. Studies so far conducted globally and specifically Kenya have not been able to address the issue of protection and documentation methods which have been accepted globally and specifically Kenya by the TMHPs. It is therefore against this background that this study is conducted.

The application of documentation and protection of indigenous traditional health knowledge methods by TMHPs through structured, legally recognized frameworks and platforms are essential for preserving endangered cultural knowledge, ensuring continuity of traditional healthcare practices, improving community health outcomes, supporting documentation and research, safeguarding cultural heritage, and promoting intergenerational transfer of indigenous healing systems. In the absence of proper methods of documenting and protecting indigenous traditional health knowledge may result in permanent loss of medicinal knowledge, biopiracy and exploitation, weak legal ownership claims, reduced legitimacy in healthcare systems, erosion of indigenous culture and identity, and poor transmission to future generations.

The documentation and protection of indigenous traditional health knowledge is of paramount

importance to the TMHPs globally hence there is need to put in place proper methods of perpetuating the practice. The methods to document and protect this knowledge among the TMHPs remains unstructured and lacks legal framework thus hindering the practice of traditional medicinal health practice. Studies so far conducted have not focused on the universally accepted methods used for documenting and protecting this knowledge. The findings of this study therefore will have immense contribution to the TMHPs who will benefit from its recommendations, government policy workers who are likely develop legal frameworks and platforms to assist the TMHPs and future researchers since this will act as the foundation on which future research will be built.

Existing studies in Kenya and similar contexts have mainly focused on the role of indigenous medicine in healthcare, health-seeking behaviours, and the integration of traditional and biomedical practices. While these studies offer valuable insights into the importance and use of indigenous medical knowledge, they pay limited attention to systematically documentation and protection methods of this knowledge, especially from the perspective of registered traditional health practitioners. Additionally, the available literature tends to examine indigenous knowledge in isolated areas such as traditional medicine or food systems without providing a comprehensive understanding of the mechanisms, protocols, and institutional frameworks required for its sustainable management.

The protection of indigenous knowledge has garnered significant scholarly interest, especially regarding intellectual property rights and cultural heritage preservation. Research indicates that current legal frameworks often fall short in addressing the collective and culturally embedded nature of indigenous knowledge (World Intellectual Property Organization, 2025; Sifuna, 2022). In Kenya, regulatory systems tend to emphasize medicinal products rather than safeguarding the underlying knowledge systems, leading to gaps in legal and institutional protections.

Empirical research further shows that traditional communities depend heavily on informal protection mechanisms, such as secrecy, limited access, and community-based norms of guardianship (Shiva, 2016). While these mechanisms effectively safeguard cultural integrity, they also restrict opportunities for official documentation and wider dissemination of knowledge.

The effectiveness of methods used by Traditional Medicine and Health Practitioners (TMHPs) in documenting indigenous traditional health knowledge varies widely. Most current studies show that TMHPs still rely heavily on informal, oral, and experience-based documentation methods, which are culturally

appropriate but often limited for long-term preservation, standardization, and wider knowledge sharing. The most common method where knowledge is passed from elders to children, relatives, or selected apprentices according to Maluleka & Ngoepe (2019) is Oral transmission (apprenticeship, storytelling, family inheritance). This method is effective since it preserves cultural context, rituals, secrecy, and tacit knowledge but weak for long-term preservation because knowledge may disappear when practitioners die or lack successors and additionally, it is vulnerable to distortion or incomplete transfer though remaining dominant while contributing to knowledge erosion where younger generations show less interest.

The challenges with the methods of documenting and protecting traditional health IK are complex. First, much of this knowledge is passed down orally through generations and is often kept within culturally regulated systems that emphasize secrecy and custodianship. This way of sharing knowledge increases the risk of losing it due to aging custodians, limited intergenerational transfer, and changing socio-cultural dynamics. Second, common perceptions that view indigenous knowledge as inferior or outdated have led to its marginalization, weakening efforts to formally recognize and preserve it. Third, current legal, institutional, and policy frameworks, including those related to intellectual property rights, are often inadequate or poorly enforced, thus failing to effectively safeguard indigenous knowledge systems.

These challenges reveal crucial gaps in processes such as knowledge capture, organization, preservation, access, and dissemination. Specifically, there is limited empirical evidence regarding the methods used in documenting and protecting this knowledge, effectiveness of these methods and proper strategies to enhance its sustainability.

The Western influence is an issue which has greatly affected TM including traditional medical practitioners. It has been noted by many scholars that the process of urbanization has greatly impacted on the use of TM in both rural and urban communities of Addis Ababa, Ethiopia, albeit both in positive and negative ways. According to (Arjona-García, *et al.*, 2021), urbanization introduces new challenges for TM that have negative impacts for instance, increased competition and “false” practitioners, loss and transformation of knowledge and influence of biomedicine and perceived modernity

Contemporary authors have come up with various strategies that can be applied in order to protect and document traditional health knowledge. For instance, Carroll *et al.*, (2025), argue that Indigenous-managed repositories strengthen intergenerational preservation while maintaining cultural control over

access and ownership. Additionally, these authors emphasize that documentation should be controlled by Indigenous communities themselves rather than external researchers or institutions. This includes: recording medicinal knowledge through audio, video, photographs, field notes, and oral histories; creating community-owned repositories, archives, or databases; using local languages and culturally appropriate metadata and involving elders, traditional healers, and apprentices in documentation processes.

Dei (2024), recommends engaging information professionals and community leaders to develop manuals and procedures for systematic knowledge capture and preservation and argues that formal documentation protocols help reduce knowledge loss and improve consistency and suggests practices which include: standardized templates for recording herbal remedies, diagnoses, dosages, and preparation methods, cataloguing medicinal plants and treatment practices and documentation guidelines for consent, ownership, and confidentiality among others. According to Dei (2024), because much traditional health knowledge is tacit, authors note that documentation should complement not replace traditional transmission methods such as: apprenticeship, mentorship, storytelling, observation and practice and ritual participation. Dei (2024), argues that these approaches preserve contextual knowledge that may not be fully captured in written form (e.g., spiritual or ceremonial dimensions). In the same breath, WIPO (2017), observes that before documenting or sharing knowledge, communities should establish: prior informed consent from healers and elders; community approval mechanisms and establish clear rules on what knowledge is public, restricted, or sacred. This helps prevent unauthorized use or commercialization.

Therefore, the continued reliance on informal, undocumented, and poorly protected knowledge systems methods end anger not only the sustainability of traditional health practices but also the broader preservation of cultural heritage and community-based knowledge. This study aims to address these issues by critically examining the methods used in the documentation and safeguarding of indigenous traditional health knowledge among registered traditional health practitioners in Kenya, with the goal of proposing contextually suitable and sustainable measures to enhance these processes.

The purpose of conducting this study was to examine methods used in the documentation and protection of indigenous traditional health knowledge among traditional Medical health Practitioners in Kenya with a view of suggesting strategies which could enhance the protection and documentation of traditional health knowledge. The main objectives of the study were to: determine methods used by TMHPs to protect and document traditional indigenous health knowledge;

assess the effectiveness of the existing protocols in protecting and documenting traditional health knowledge; examine challenges faced by TMHPs in protecting and documenting traditional health knowledge and suggest effective strategies aimed at protecting and documenting traditional health knowledge.

Against this backdrop, there is an increasing need to critically examine the methods TMHPs use to document and protect indigenous traditional health knowledge in real-world settings. Understanding these processes is vital for developing strategies that not only preserve such knowledge but also ensure its responsible use and long-term sustainability.

Theoretical Framework

This study primarily relies on the SECI Model for Knowledge Creation developed by Ikujiro Nonaka and Hirotaka Takeuchi, which describes knowledge creation as a dynamic process involving transforming tacit and explicit knowledge through four modes: socialization, externalization, combination, and internalization. The relevance of this model to the current study lies in its ability to explain how indigenous knowledge primarily tacit and rooted in traditional health practitioners can be shared, expressed, documented, and preserved.

To complement this perspective, elements of Social Exchange Theory are incorporated to explain the motivations behind knowledge sharing and withholding among traditional health practitioners. The theory suggests that individuals participate in knowledge exchange based on perceived benefits and costs. In the context of indigenous knowledge, these factors may include cultural obligations, fear of misappropriation, and expectations of reciprocity.

METHODOLOGY

Philosophical Perspective - interpretivist

This study used a qualitative research approach to analyse knowledge sharing among registered traditional health practitioners in Kenya basing itself on interpretivist paradigm, which holds that reality is socially constructed and that knowledge is derived from the meaning individuals assign to their experiences (Creswell & Poth, 2018). The qualitative approach also aligns with the interpretivist paradigm underpinning this study, which assumes that reality is socially constructed and that knowledge is co-created through interaction between the researcher and participants (Tracy, 2020). The interpretivist paradigm highlights the shared creation of knowledge between the researcher and participants, acknowledging that meaning develops through interaction and dialogue (Tracy, 2020). In this study's context, indigenous knowledge is more than just a collection of practices; it is a socially rooted system

influenced by cultural beliefs, norms, and lived experiences.

Research Approach

This study used a qualitative research approach to examine the documentation and protection of traditional indigenous health knowledge among registered traditional health practitioners in Kenya. A qualitative approach was deemed suitable because the study aimed to understand how practitioners interpret, experience, and manage indigenous knowledge within their socio-cultural contexts, rather than to measure or quantify predetermined variables.

Qualitative research is particularly well-suited to studies seeking to generate detailed, contextually grounded insights into complex social phenomena (Creswell & Poth, 2018; Merriam & Tisdell, 2016). In this study's context, indigenous knowledge is not just a collection of observable practices but a socially embedded and culturally mediated system of meaning, shaped by traditions, beliefs, and lived experiences. Understanding such knowledge requires engaging with participants' perspectives, interpretations, and practices within their natural environments.

Research study Design

This study employed a qualitative case study approach to analyse the sharing of traditional health indigenous knowledge among registered traditional health practitioners in Kenya. A case study was considered suitable because it enables an in-depth, contextually grounded exploration of complex social phenomena within their real-life environments (Yin, 2018). The choice of a case study design was influenced by the nature of the research problem, which required a detailed understanding of how indigenous knowledge is generated, shared, documented, and protected within specific socio-cultural and institutional contexts.

Study Population

The study's overall population consisted of 210 registered traditional health practitioners in Kenya. The target population for the study was 40 (forty) officially registered traditional health practitioners plus seven Key informants from Ministry of Culture, Sports, and the Arts in two counties that served as the study area: 19 traditional health practitioners in Kakamega County and 21 in Bungoma County. This number excluded any traditional medical practitioners not officially registered with the Ministry.

Sampling Techniques

This study used Census and purposive sampling methods to choose participants from the target group of registered traditional health practitioners within study areas of Bungoma and Kakamega Counties. These methods were suitable for the qualitative nature of the study, which focuses on selecting information-rich

individuals who can provide in-depth insights into the documentation and safeguarding of traditional indigenous health knowledge. Census sampling was the primary method for selecting participants from Bungoma and Kakamega since the number was relatively small justifying the inclusion of all the participants.

In addition to traditional health practitioners, purposive sampling was used to select key informants with relevant institutional and regulatory expertise. These included seven (7) officials from the Ministry of Sports, Culture, and the Arts, two (2) officers from County Headquarters offices, and one (1) representative each from the Kenya Medical Research Institute (KEMRI), the National Museums of Kenya (NMK), the Association of Herbalists, and clinical medical practitioners. These key informants offered insights into policy frameworks, regulatory mechanisms, and institutional practices for documenting and protecting indigenous knowledge in Kenya.

Pilot study

Before the main data collection, a pilot study was carried out to evaluate the effectiveness and suitability of the data collection tools and procedures. The goal of the pilot was to improve the interview guide, assess the clarity and relevance of the questions, and ensure the data collection process was culturally appropriate and ethically sound. The pilot study was conducted with a small group of participants who shared similar characteristics with the main study population but were not included in the final sample. These participants comprised 10 traditional health practitioners selected purposively from Vihiga County based on their experience and willingness to participate.

The pilot study improved the credibility and reliability of the research instruments by ensuring they were clear, relevant, and capable of producing rich, meaningful data aligned with the study objectives. The improved instruments were then used in the main data collection phase.

Data Collection Methods

This study used qualitative data collection methods, specifically in-depth semi-structured interviews and non-participant observation, to gather rich, contextually grounded data on protection and documentation of traditional indigenous health knowledge among registered traditional health practitioners. These methods were chosen for their ability to capture both experiential insights and socio-cultural dynamics within natural settings.

Semi-structured interviews were the primary method of data collection. This method allowed the researcher to explore participants' experiences, perspectives, and practices in a flexible, interactive manner while remaining focused on the study's goals

(Creswell & Poth, 2018). Using open-ended questions gave participants the space to share their knowledge, practices, and interpretations of documentation and protection processes in their own words. This was especially important because indigenous health knowledge is mostly tacit, experiential, and rooted in cultural contexts.

Interviews were conducted with both traditional health practitioners and key informants. Interviews with traditional health practitioners focused on eliciting information on indigenous knowledge domains, documentation methods, knowledge-sharing practices, and mechanisms for protection. Interviews with key informants, on the other hand, focused on institutional perspectives, including policy frameworks, regulatory practices, and strategies for safeguarding indigenous knowledge.

Besides interviews, non-participant observation was used to supplement and deepen the data. Observation enabled the researcher to examine practices, interactions, and contextual factors that might not have been fully captured by self-reported data. This included seeing how knowledge is put into practice, how practitioners engage with clients, and how cultural norms shape knowledge-sharing and protection.

Observation was especially crucial for capturing tacit aspects of indigenous knowledge, which are often hard to put into words. By conducting data collection in natural settings, the study gained a more comprehensive understanding of knowledge practices in real-life situations.

The combination of interviews and observation enabled methodological triangulation, which enhanced the depth and credibility of the findings. While interviews offered detailed accounts of participants' perspectives and experiences, observation provided contextual validation and insights into actual practices. Together, these methods created a comprehensive basis for examining the processes and socio-cultural dynamics involved in documenting and safeguarding traditional indigenous health knowledge.

Data Collection Procedure

Data collection was conducted systematically and iteratively to guarantee the production of rich, credible, and contextually grounded data. The process included several stages: preparation, participant engagement, data collection, and ongoing reflection.

Before collecting data, the researcher secured the necessary approvals from relevant institutions and regulatory agencies. Access to the study sites was gained through initial contact with key informants and practitioner networks, which allowed entry to registered traditional health practitioners in the area. Potential

participants were approached, informed about the study's purpose, and asked to voluntarily participate.

Data collection mainly involved in-depth semi-structured interviews and non-participant observation. Interviews took place at locations convenient for the participants, often within their usual work settings, to ensure comfort and to better understand the real-world context. Each interview lasted 30–60 minutes, depending on the responses and the participant's availability.

With participants' consent, interviews were audio-recorded to accurately capture information. Field notes were also taken during and after each interview to record non-verbal cues, contextual observations, and emerging reflections. When recording was not permitted, detailed notes were taken to ensure complete data collection.

Non-participant observation was conducted alongside interviews to document practices, interactions, and contextual factors related to the protection and documentation of indigenous knowledge. Observations focused on how knowledge is used in practice, how practitioners interact with clients, and how cultural norms influence knowledge-sharing and safeguarding processes.

Data collection and analysis were conducted concurrently, allowing emerging insights to inform subsequent data collection. This iterative process enabled the refinement of interview questions and the identification of key themes requiring further exploration. Data collection continued until thematic saturation was achieved, that is, the point at which no new significant insights were emerging.

Throughout the data collection process, the researcher kept reflexive awareness to reduce bias and accurately represent participants' perspectives. This involved ongoing reflection on the researcher's role, interactions with participants, and possible influence on data interpretation.

Overall, the procedure maintained methodological rigor through systematic planning, ethical engagement with participants, and iterative data collection, thereby improving the credibility and depth of the findings.

Data Analysis

Data generated from interviews and observations were analyzed using thematic analysis. This method was chosen because it offers a systematic and flexible approach to identifying, analyzing, and interpreting patterns of meaning in qualitative data (Braun & Clarke, 2006). Thematic analysis was particularly suitable for this study because it enabled the researcher to explore participants' perspectives on the

documentation and protection of traditional indigenous health knowledge in a detailed, context-aware manner.

The analysis followed the six-phase method proposed by Braun and Clarke (2006). The first step involved getting familiar with the data, where audio-recorded interviews were transcribed word-for-word and reviewed alongside field notes. The researcher repeatedly read the transcripts to thoroughly understand the content and identify initial patterns.

The second phase involved creating initial codes. Relevant data segments related to the study goals were identified and labeled systematically. Coding was done inductively, letting themes emerge from the data while also being guided by the study objectives and conceptual framework.

In the third phase, codes were analyzed and grouped into broader categories to develop initial themes. These themes reflected recurring patterns related to indigenous knowledge areas, documentation practices, protection strategies, and knowledge-sharing processes.

The fourth phase involved reviewing and refining the themes to ensure internal consistency and distinctiveness. At this stage, themes were compared against the coded data and the entire data set to confirm that they accurately represented participants' perspectives.

The fifth phase involved defining and naming the themes. Each theme was clearly explained in relation to the study objectives, thereby highlighting a meaningful aspect of the data. For example, themes such

as cultural preservation, knowledge secrecy, intergenerational transfer, and risks of misappropriation emerged as key factors influencing the documentation and protection of indigenous knowledge.

The final stage involved analyzing and reporting the findings. The themes were examined in relation to the study's conceptual framework. The SECI model guided the interpretation of how tacit indigenous knowledge is shared, expressed, and documented, while Social Exchange Theory offered insights into how practitioners assess the benefits and risks of knowledge sharing. This integration enabled a deeper understanding of the processes and socio-cultural dynamics involved in knowledge documentation and preservation.

To strengthen the analysis's credibility, coding and theme development were carried out systematically, with themes supported by representative excerpts from participants' responses. The frequency and depth of coded excerpts were used to evaluate the significance and relevance of each theme, while ensuring that different perspectives were included in the analysis.

Overall, thematic analysis provided a rigorous and coherent framework for organizing and interpreting qualitative data, enabling the study to yield meaningful insights aligned with its objectives.

An illustration of the coding process is presented in Table 1, which demonstrates how raw data extracts were systematically transformed into initial codes, refined categories, and final themes. The table provides transparency in the analytical process and shows how meanings were derived from participants' responses in relation to the study objectives.

Table 1: Illustration of Coding and Theme Development for the Importance of Protecting and Documenting Traditional Health Indigenous Knowledge (n = 30)

Data Extract (Verbatim Response)	Initial Code	Refined Code (Category)	Final Theme	Interpretive Meaning
"When elders die, their knowledge disappears."	Death	Loss of knowledge	Knowledge preservation	Indigenous knowledge is vulnerable due to a lack of documentation and reliance on oral transmission.
"This knowledge defines who we are as a community."	Culture	Cultural identity	Cultural preservation	Indigenous knowledge is central to community identity and heritage.
"Young people are no longer interested in learning this knowledge."	Youth Disinterest	Weak intergenerational transfer	Knowledge continuity challenges	Declining transmission threatens the sustainability of indigenous knowledge.
"We need to record this knowledge so it can be taught."	Documentation	Need for formal recording	Documentation for sustainability	Documentation is seen as a tool for preservation and education.
"Others can steal our knowledge and use it for profit."	Biopiracy	Risk of exploitation	Protection against misappropriation	Concerns about intellectual property and unauthorized use influence knowledge-sharing behaviour.

Data Extract (Verbatim Response)	Initial Code	Refined Code (Category)	Final Theme	Interpretive Meaning
“This knowledge helps treat many diseases.”	Healing value	Medicinal importance	Functional significance of IK	Indigenous knowledge is valued for its practical health benefits.
“If we share everything, we may lose control over it.”	Secrecy	Controlled knowledge sharing	Knowledge protection practices	Cultural norms regulate access and sharing of knowledge.
“There should be laws to protect our knowledge.”	Policy need	Legal protection	Institutional protection mechanisms	Formal regulatory frameworks are needed to safeguard indigenous knowledge.

Ethical Considerations

Ethical considerations were key to this study, due to the sensitive nature of indigenous knowledge and the importance of respecting cultural values and practices of traditional health practitioners. The study followed established ethical principles of voluntary participation, informed consent, confidentiality, cultural respect, and integrity in data handling and reporting.

Prior to data collection, the necessary research approvals were obtained from relevant institutional and regulatory bodies. Entry into the study sites was conducted through appropriate administrative and community channels to ensure legitimacy and respect for local structures.

Informed consent was obtained from all participants before their involvement in the study. Participants received clear information about the study's purpose, the nature of their participation, and their right to withdraw at any time without penalty. This ensured that participation was voluntary and based on a full understanding of the research process.

Confidentiality and anonymity were strictly maintained throughout the study. Participants' identities were protected using pseudonyms, and any identifying information was removed during data transcription and reporting. Data were securely stored and accessed only by the researcher to prevent unauthorized disclosure.

Due to the cultural sensitivity of indigenous knowledge, careful attention was given to respecting norms of secrecy, custodianship, and ownership of knowledge. The researcher refrained from probing into areas considered sacred, confidential, or restricted by participants. Participants were free to decide how much information they wanted to share, and no effort was made to obtain sensitive or protected knowledge. This approach helped ensure that the study did not

compromise the integrity or ownership of indigenous knowledge systems.

Additionally, the study acknowledged the potential risks of misappropriating and misusing indigenous knowledge. Therefore, efforts were made to ensure that the information gathered was used exclusively for academic purposes and reported in a way that did not expose or commercialize participants' knowledge.

To ensure the integrity of data analysis and reporting, the researcher-maintained objectivity and avoided selective presentation of findings. Different perspectives, including conflicting views, were included to provide a balanced and accurate account of participants' experiences. Verbatim excerpts were used to support interpretations, anchoring findings in participants' voices.

Additionally, all sources were properly credited by following APA referencing guidelines, which helped avoid plagiarism and uphold academic integrity.

Overall, these ethical measures ensured the study was conducted in a way that respected participants, protected indigenous knowledge, and maintained the credibility and integrity of the research process.

FINDINGS OF THE STUDY

Documentation Practices of Indigenous Health Knowledge

The findings show that documentation of indigenous health knowledge by traditional health practitioners is mostly informal, scattered, and limited in scope. As shown in Table 2 most practitioners depend on memory, oral transmission, and personal records rather than on structured or standardized documentation methods.

Table 2: Comparison summary of the findings on the methods of documenting Indigenous Knowledge between Main Respondents (TMHP) and Key Respondents

Codes	Main Respondents (TMHP)	Key Informants
Documentation	Need to protect and document for posterity and future use.	-Documenting IK on plants & food -NATHEPA agreed that there have been a number of initiatives in this direction -The Ministry is to form a committee on the documentation of IK
Policy	Operationalization of the 2017 Act has not been done by Parliament -Need to put in proper policies to guide the operations of TMHP	-Operationalization of the traditional knowledge & cultural expression Act and the Nagoya protocol on access to genetic resources & fair and equitable sharing of benefits. -Need to develop procedures -The Ministry of Culture to be convinced of MAT. -Implementing the Constitution 2010, which includes Chapter Six for the cohesion of TMHP
Finance	TMHP is to be provided with funds for their activities, including protection and documentation of IK.	Ministry of Culture to be empowered in order to reach out to THMP, and this includes soliciting funds from sports to support the Acts/policies.
Sensitization	Ministry of Culture and NATHEPA to sensitize TMHP on the best method of protecting and documenting IK.	Ministry is working with other partners, e.g., NMK, to sensitize TMHP -Herbalists to be sensitized on PIC -Counties need to be sensitized.
Research	-	-

Many practitioners report documenting knowledge through informal methods such as personal notebooks, verbal instructions to apprentices, and experiential learning. However, these methods are neither systematic nor standardized, which restricts the preservation and broader accessibility of this knowledge.

Some practitioners reported documenting their knowledge through participation in seminars, workshops, and forums organized by stakeholders, including the Ministry of Culture, the National Museums of Kenya, and professional associations such as NATHEPA. These forums offer opportunities for knowledge exchange and partial documentation, although their impact remains limited.

These findings indicate that indigenous health knowledge remains implicit and embedded in practice, with little of it turning into explicit, documented forms. This hinders its long-term preservation and integration into formal knowledge systems.

Protection Mechanisms and Practices

The study found that the protection of indigenous health knowledge among traditional health practitioners is mainly governed by cultural norms of secrecy, restricted access, and selective knowledge sharing rather than by formal legal or institutional mechanisms.

Many practitioners emphasized the importance of restricting access to knowledge to safeguard it from misuse and exploitation. Knowledge was often shared only within trusted networks, particularly among close

family members or apprentices. As one respondent explained:

"This knowledge cannot be shared with everyone but by close family members" (R1).

This practice exemplifies a culturally rooted approach to safeguarding knowledge, in which ownership and control remain within specific social groups.

Besides limited sharing, practitioners voiced worries about the dangers of revealing their knowledge to outsiders. One respondent remarked:

"...you don't know who you are talking to" (R2) highlighting concerns about misappropriation and loss of control over indigenous knowledge.

These concerns were further emphasized by the economic value attributed to traditional health knowledge. Practitioners stated that their knowledge is a source of livelihood, and uncontrolled sharing could lead to market saturation and lower economic returns. Therefore, secrecy serves not just as a cultural practice but also as a strategy for economic protection.

Key informants also recognized practitioners' hesitance to share knowledge, with one noting:

"Most of them are unwilling to share" (R3).

While secrecy and controlled sharing act as protective mechanisms, the findings indicate that these strategies might also hinder efforts to officially document and preserve indigenous knowledge. This creates a conflict between protecting and recording

knowledge, where attempts to safeguard it could unintentionally limit access and increase long-term vulnerability.

Role of Technology in Documentation and Protection

The findings further show that the use of technology to document and safeguard indigenous health knowledge remains limited. As demonstrated in Table 4, only a small number of practitioners reported using

digital tools or technologies to record or share knowledge.

The slow adoption of technology results from several factors, including low literacy levels, limited access to technological resources, and a lack of awareness about digital documentation methods. Additionally, concerns about knowledge theft and misuse discourage practitioners from digitizing their knowledge.

Table 3: Role of technology in the protection and documentation of IK (n = 30)

S/No	Initial Code	Sample Quote	No of Transcript Excerpts Assigned
1	Treatment	“Testing efficacy” (R 4) “Knowing various herbal medicine” (R 5) “Helping particularly in reflexology” (R 6) “Helping in packaging, e.g., capsules” (R 7) “Googling for various treatment” (R 8) “Helping with knowledge on liquid treatment” (R 85)	4
2	Creating awareness	“Knowledge of where to seek treatment on traditional medicine” (R 9) “WhatsApp, Facebook, etc.” (R 10) “Identification of plants” (R 11) “creating awareness by putting your drugs on a website” (R 12) “everybody uses media for advertising” (R 13) “ICT can assist in introducing traditional knowledge in schools” (R 14)	3
4	Documentation	“Helping in documenting IK for future reference” (R 15)	2
5	No responses	-	21

Despite these challenges, some respondents acknowledged the potential of technology to enhance the documentation, storage, and sharing of indigenous knowledge. This reflects a growing awareness of the role digital tools could play if proper safeguards are put in place.

Institutional and Policy Frameworks Supporting Documentation and Protection

The study also explored how institutional and policy frameworks support the documentation and safeguarding of indigenous health knowledge. Findings show that current frameworks are fragmented, poorly implemented, and do not adequately address the needs of traditional health practitioners.

Practitioners voiced concerns about the lack of clear policies, weak enforcement of existing laws, and limited institutional support. Although legislation such as the Protection of Traditional Knowledge and Cultural Expressions Act exists, its implementation at the practitioner level has been ineffective.

Key informants similarly highlighted challenges, including a lack of awareness among practitioners, insufficient stakeholder coordination, and

limited financial and technical support for documentation efforts.

The synthesis of findings for this study demonstrates that:

- Documentation of indigenous health knowledge is largely informal, oral, and unstructured
- Protection is primarily achieved through secrecy, controlled sharing, and cultural norms
- Technology is underutilized, despite its potential benefits
- Institutional and policy frameworks are fragmented and inadequately implemented

These findings show that although traditional health practitioners use various methods to manage their knowledge, these strategies are still not sufficient to ensure proper documentation and robust protection.

DISCUSSION OF THE FINDINGS

The findings of this study revealed that the documentation and protection of traditional indigenous health knowledge among registered traditional health practitioners are shaped by a complex interaction among cultural practices, health system dynamics, and institutional limitations. While documentation practices remain largely informal and limited, protection

mechanisms are predominantly governed by secrecy, selective knowledge sharing, and practitioner-controlled systems.

From the analysis, four key themes emerged:

- Informality and practice-embedded nature of documentation in traditional medicine
- Secrecy and controlled transmission as primary protection mechanisms
- Tension between documentation and protection in traditional health systems
- Weak alignment between formal health governance structures and indigenous practice realities

Theme 1: Informality and Practice-Embedded Nature of Documentation

The study found that documentation of indigenous health knowledge among traditional health practitioners is mostly informal, scattered, and mainly oral. Knowledge is built through daily practice, observation, and patient interaction rather than being systematically recorded in structured formats.

This finding aligns with Gakuya *et al.*, (2020), who observed that traditional medicine in Kenya is mainly transmitted through oral traditions and experiential learning, with limited formal documentation. Similarly, Lampiao *et al.*, (2019) found that ethnomedical knowledge in African contexts is preserved within practice environments rather than in institutional repositories. In the Kenyan context, Kogo *et al.*, (2025), further noted that indigenous therapeutic knowledge is often undocumented and resides within practitioner experience rather than formal health systems.

However, this study extends these findings by demonstrating that documentation is not merely absent but is replaced by practice-based recording, in which knowledge is retained through repeated application, observation of outcomes, and patient interaction.

While earlier studies describe indigenous health knowledge as undocumented, this study demonstrates that documentation occurs in non-textual, practice-based forms, thereby broadening the understanding of what constitutes “documentation” in traditional health systems. The study contributes by reconceptualizing documentation in traditional medicine as practice-embedded knowledge preservation, rather than just written or formal recording.

Theme 2: Secrecy and Controlled Transmission as Protection Mechanisms

The findings showed that protecting indigenous health knowledge mainly relies on secrecy, limited sharing, and controlled transfer within trusted networks such as family members and apprentices.

This finding aligns with Ngere *et al.*, (2022), who observed that traditional healing knowledge in African communities is often protected because of its cultural and spiritual importance. Similarly, Rutto (2025) noted that traditional practitioners selectively share knowledge to maintain control and preserve their integrity. Studies such as those by Cheboi *et al.*, (2023) also show that traditional medicine operates within socially regulated systems in which access to knowledge is restricted.

However, this study extends the current literature by showing that secrecy is not only culturally influenced but also economically driven, as practitioners link knowledge sharing with the potential loss of livelihood and market edge.

While previous studies focus on cultural protection, this study highlights economic protection as a key aspect, demonstrating that knowledge is regarded as both a cultural and economic asset.

Thus, the study offers empirical evidence that secrecy acts as a dual protective mechanism—cultural and economic—broadening the understanding of knowledge protection in traditional health systems.

Theme 3: Tension Between Documentation and Protection

A key finding of this study is the inherent tension between the need to document indigenous health knowledge and the obligation to protect it. Practitioners see documentation as a potential risk that could expose knowledge to misuse, appropriation, and loss of control.

This finding agrees with Carroll *et al.*, (2020) on indigenous data governance, highlighting the importance of communities controlling how their knowledge is recorded and used. In health contexts, Gakuya *et al.*, (2020) similarly note that concerns about the misuse of traditional medicine knowledge discourage open documentation.

However, this study offers a more grounded, context-specific explanation by showing that practitioners actively resist documentation because of their lived experiences of mistrust, weak legal protections, and economic vulnerability.

While existing studies frame this issue in terms of intellectual property and governance, this study shows that the tension is felt at the practitioner level as a practical dilemma: documenting knowledge might weaken its protection.

The study redefines the relationship between documentation and protection of indigenous health knowledge as inherently conflicted rather than mutually supportive. In traditional knowledge management

frameworks, documentation is often seen as a crucial method for preservation and safeguarding, based on the idea that codified knowledge can be more easily stored, shared, and protected. However, this study's findings challenge the belief that, within conventional health systems, documentation might simultaneously heighten the risk of knowledge exposure, misappropriation, and loss of control.

For traditional health practitioners, knowledge is not just information; it's deeply connected to cultural identity, spiritual significance, and economic livelihood. Consequently, documenting this knowledge in formal or accessible formats may weaken its protection by exposing it to unauthorized use, such as biopiracy and exploitation within broader health and commercial systems. This presents a core dilemma for practitioners: efforts to preserve knowledge through documentation can clash with the need to protect it through secrecy and controlled sharing.

Therefore, documentation and protection are not always complementary, as assumed in traditional knowledge management models, but often compete as important priorities that need to be balanced within indigenous health systems. This insight enhances current discussions on knowledge management by emphasizing the importance of approaches that consider the social, cultural, and economic factors involved in governing knowledge in traditional health practices.

Theme 4: Weak Alignment Between Formal Health Systems and Indigenous Practice

The findings further revealed that institutional and policy frameworks designed to support the documentation and protection of indigenous health knowledge are poorly aligned with the realities faced by traditional health practitioners.

This aligns with Sifuna (2022), who observed that Kenya's regulatory frameworks for traditional knowledge are fragmented and poorly enforced. Similarly, Ahmed *et al.*, (2023), noted that traditional medicine remains marginal within formal healthcare systems despite its widespread use. The WHO Traditional Medicine Strategy (2014–2023) also recognizes the global challenge of integrating traditional medicine into formal health systems.

However, this study expands on these findings by showing that challenges facing indigenous health knowledge are not limited to weak policies or institutional support but also arise from fundamental differences in how knowledge is understood and organized. Formal systems are based on written, standardized, and biomedical approaches, whereas indigenous health knowledge is largely oral, experiential, and culturally embedded. As a result, formal frameworks are not fully compatible with

indigenous knowledge practices, making documentation and protection difficult even when institutional support is in place.

This is a crucial starting point: While previous studies focus on policy gaps, this research emphasizes a deeper misalignment between knowledge systems, specifically the insufficient integration of indigenous knowledge within formal health governance structures.

The study reveals that limitations in the documentation and protection of indigenous health knowledge stem from a systemic mismatch between culturally grounded indigenous knowledge systems and formal health frameworks, which are largely designed around biomedical and written knowledge paradigms. This misalignment restricts the effective integration, recognition, and safeguarding of indigenous health knowledge, thereby contributing to its continued marginalization within formal health systems.

The previous discussion shows that the documentation and safeguarding of indigenous health knowledge are influenced by:

- practice-based knowledge systems
- cultural and economic protection mechanisms
- structural tensions between preservation and control
- institutional and epistemological misalignment

CONCLUSION

The documentation and protection of indigenous health knowledge are governed by culturally rooted practices that emphasize control, secrecy, and selective sharing. Formal documentation is limited due to perceived risks of exposure and loss of ownership. This supports the idea that practitioners face difficulties in recording and protecting their knowledge.

The existing documentation and protection mechanisms are largely ineffective due to misalignment between formal systems and indigenous practices, weak institutional support, and limited trust among practitioners. This ineffectiveness is systemic, stemming from interconnected cultural, institutional, and epistemological factors rather than isolated weaknesses. Additionally, the methods of documenting this knowledge is unstructured and lack legal framework.

Overall, protection and documentation of indigenous health knowledge among traditional health practitioners are limited by systemic, mechanisms, cultural, and institutional barriers. Overcoming these barriers requires shifting from traditional, formal methods to context-aware frameworks that acknowledge the cultural, economic, and epistemological bases of indigenous knowledge systems.

RECOMMENDATIONS

Based on the findings and conclusions, the study makes the following recommendations:

Development of Context-Sensitive Documentation Systems

First, the study found that existing documentation systems are mostly out of sync with indigenous health practices, especially because they rely on formal, written, and standardized methods that don't properly represent oral, experiential, and culturally rooted knowledge systems.

To address this gap, it is recommended that hybrid, context-sensitive documentation systems be developed that combine formal recording methods with practice-based, oral, and community-controlled approaches. These systems should ensure knowledge is preserved while giving practitioners control over access and use. This initiative should be led by institutions such as the Ministry of Culture, the Kenya National Archives and Documentation Service (KNADS), relevant research institutions such as KEMRI, and county governments, with implementation planned over a medium-term timeframe of about 2 to 5 years.

Strengthening Legal and Institutional Protection Frameworks

The study showed that current protection mechanisms are weakened not only by legal and policy gaps but also by limited trust from practitioners and perceived lack of legitimacy of formal systems.

In response, there is a need to strengthen legal and institutional protection frameworks while ensuring meaningful involvement of traditional health practitioners in policy formulation and implementation processes. This participatory approach is likely to improve both the legitimacy and effectiveness of protection systems. The responsibility for this effort lies with the national government, relevant ministries such as the Ministry of Culture and the Ministry of Health, and legal and policy bodies, with implementation expected over a medium- to long-term period of three to seven years.

In sum, the study establishes that the documentation and protection of indigenous health knowledge among traditional health practitioners in Kenya remain constrained by a fundamental misalignment between formal knowledge management frameworks and culturally embedded indigenous practices, thereby limiting the effectiveness of existing mechanisms and underscoring the need for context-sensitive and practitioner-centered approaches.

REFERENCES

- Ahmed, G. E. M., Ahmed, E. Y. M., Ahmed, A. E., Hemmeda, L., Birier, A. B., Abdelgadir, T., Mosaab AhmedElbashir Hassan, H., Alfadul, E. S. A., Bakr, M., & Sadig, E. (2023). Prevalence and reasons to seek traditional healing methods among residents of two localities in North Kordofan State, Sudan 2022: A cross-sectional study. *Health Science Reports*, 6(8), e1487. <https://doi.org/10.1002/hsr2.1487>.
- Arjona-García, C., Blancas, J., & Beltrán-Rodríguez, L. *et al.*, (2021). *How does urbanization affect perceptions and traditional knowledge of medicinal plants?* *Journal of Ethnobiology and Ethnomedicine*, 17, 48 — Urbanization alters the physical environment and local knowledge practices.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Carroll, S. R., *et al.*, (2020). The CARE principles for Indigenous data governance. *Data Science Journal*, 19(43), 1–12.
- Chebii, W. K., Muthee, J. K., & Kiemo, K. (2020). *The governance of traditional medicine and herbal remedies in the selected local markets of Western Kenya*. *Journal of Ethnobiology and Ethnomedicine*, 16, Article 39. <https://doi.org/10.1186/s13002-020-00389-x>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Dei, D. G. J. (2024). Strategies for capturing, managing, and sharing indigenous knowledge. *Journal of Librarianship and Information Science*. Advance online publication. <https://doi.org/10.1177/02666669241248832>
- Gakuya, D.W., *et al.*, (2020). *Traditional medicine in Kenya: past and current status...* *Journal of Ethnopharmacology*. (Herbal medicine is most popular due to cost-effectiveness and access in low-resource settings).
- Girard, J. P., & Girard, J. L. (2015). *Defining knowledge management: Toward an applied compendium*. *Online Journal of Applied Knowledge Management*, 3(1), 1–20
- Kogo, Karen Omare, Simon & Rono, Miriam (2025). Integration of indigenous medicine with the conventional health care systems in Kibiyet, Nandi County, Kenya. *Journal of Research and Academic Writing*, 2(2), 2025
- Kukutai, T., & Taylor, J. (2016). *Indigenous data sovereignty: Toward an agenda*. Canberra: ANU Press.
- Lampiao, F., Chisaka, J., & Clements, C. (2019). Communication Between Traditional Medical Practitioners and Western Medical Professionals. *Frontiers in Sociology*, 4:37.
- Maluleka, J. R., & Ngoepe, M. (2019). *Integrating traditional medical knowledge into mainstream healthcare in Limpopo Province*. *Information Development*, 35(5), 807–819. <https://doi.org/10.1177/0266666918785940>

- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass
- Mutekwe, E. (2015). Indigenous knowledge systems and education in Africa. *International Journal of African Renaissance Studies*, 10(2), 129–140.
<https://doi.org/10.1080/18186874.2015.1107988>
- Mutombo, P. N., *et al.*, (2023). *Experiences and Challenges of African Traditional Medicine*. BMJ Global Health. BMJ Global Health.
- National Commission for Science, Technology and Innovation. (2024). *STI mainstreaming performance report (FY 2023/2024)*. Nairobi, Kenya: NACOSTI.
- Nonaka, I., & Takeuchi, H. (1995/2009). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York, NY: Oxford University Press.
- Ngere, S. H., Akelo, V., Ondeng'e, K., Ridzon, R., Otieno, P., Nyanjom, M., Omere, R., & Tippett Barr, B. A. (2022). *Traditional medicine beliefs and practices among caregivers of children under five years — The Child Health and Mortality Prevention Surveillance (CHAMPS), Western Kenya: A qualitative study*. PLoS ONE, 17(11), e0276735.
<https://doi.org/10.1371/journal.pone.0276735>
- Rutto, A. R. (2025). *Utilization of traditional medicine in Nairobi: a case study of Kibera slum*. University of Nairobi Repository. University of Nairobi eRepository
- Shiva, V. (2016). *Who really feeds the world? The failures of agribusiness and the promise of agroecology*. Berkeley: North Atlantic Books.
- Sifuna, N. (2022). *Configuring a Model Framework Statute on Traditional Medicine for Kenya – commentary on the regulatory system's fragmentation*.
- Smith, L. T. (2021). *Decolonizing methodologies: Research and Indigenous peoples* (3rd ed.). Zed Books.
- Tracy, S. J. (2020). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (2nd ed.). Wiley-Blackwell.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
- WIPO. (2024). *Report of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (WIPO/GRTKF/IC/5/15) — Delegation of Venezuela's comments on the risks of cataloguing traditional knowledge* (pp. 31–32). Geneva: World Intellectual Property Organization.
- World Health Organization (WHO) (2019). *WHO Traditional Medicine Strategy 2014–2023*. Geneva: WHO.
- World Intellectual Property Organization (WIPO) Secretariat. (2025). *Online databases and registries of traditional knowledge and genetic resources* [Briefing/resource page]. World Intellectual Property Organization. Retrieved from https://www.wipo.int/en/web/traditional-knowledge/resources/db_registry
- World Intellectual Property Organization. (2017). *Documenting Traditional Knowledge – A Toolkit*. Geneva: WIPO.
- World Intellectual Property Organization. (2024). *Report on the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) (Document WO/GA/57/7)*. World Intellectual Property Organization.
https://www.wipo.int/edocs/mdocs/govbody/en/wo_ga_57/wo_ga_57_7.pdf