



Preserving Indigenous Knowledge through Older Adults in Ghana: Challenges and Information Management Strategies

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Abstract

The dominant framing of indigenous knowledge preservation as a technological problem, solvable through better documentation tools, digital archives, and metadata systems, misdiagnoses what is actually at stake in Ghana. Knowledge held by older adults does not decay because it lacks a recording device. It decays because the social conditions that make it meaningful, transmissible, and worth transmitting are eroding. This narrative review argues that any preservation framework oriented primarily toward capture rather than toward the renewal of community conditions is likely to produce archives that communities do not use, do not control, and do not trust. Drawing on peer-reviewed literature published primarily between 2018 and 2025, with selective reference to foundational works where these provide irreplaceable empirical baselines, the review maps the principal forms of elder-held knowledge in Ghana, spanning traditional medicine, oral traditions, agricultural adaptation, and governance, and analyses the structural challenges that impede their intergenerational transmission. It then synthesises information management strategies organised around the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) and the CARE Principles for Indigenous Data Governance (Carroll et al., 2020), two frameworks chosen precisely because they centre community authority and collective benefit rather than institutional efficiency. The review also insists on a point that preservation literature tends to avoid: not all indigenous knowledge is equally valued or uniformly beneficial within the communities that hold it, and preservation frameworks that bypass community deliberation about what deserves to be preserved, and on whose terms, risk romanticising tradition rather than serving communities. Sustainable preservation depends less on technology than on trust, community self-determination, and policies grounded in Ghana's existing institutional landscape.

Keywords: Indigenous Knowledge, Older Adults, Ghana, Knowledge Preservation.

Introduction

In Ghana and across Africa, knowledge does not primarily exist in written texts or digital databases. It is carried within the lived experience, memory, and everyday practices of people, and particularly the elderly (Dei, 2024). These knowledge systems, born from generations of interaction with specific

environments and cultural contexts, address pressing questions about health, food production, conflict resolution, governance, and spiritual life (Senanayake, 2006).

Consider what this means concretely. An elder herbalist in rural Ghana possesses knowledge of medicinal plants extending well beyond identification:

the timing and location of ethical harvesting, the preparation methods for specific conditions, and the spiritual and social protocols that give treatment its legitimacy within the community. Boadu and Asase (2017) documented that elder practitioners in southern Ghana work with at least 52 plant species from 28 different families, addressing 42 distinct diseases, expertise accumulated over decades that no formal training institution currently teaches. A farmer in the savanna knows how to read subtle environmental cues to predict seasonal weather. In Northern Ghana, Nyadzi et al. (2021) found that older farmers maintain indigenous weather prediction systems based on observation of vegetation patterns, animal behaviour, and atmospheric conditions, providing early warnings calibrated to specific micro-environments that general meteorological models cannot capture. A traditional storyteller maintains historical narratives and moral teachings that connect communities to their past and guide behaviour in the present. This knowledge is practical, contextualised, and embedded in cultural practices and social relationships (Briggs & Moyo, 2012; Muir et al., 2010). It is also at risk.

As Ghana modernises and globalises, Western-centred education systems, urban migration, and changing economic pressures weaken the conditions under which indigenous knowledge passes from older to younger generations (Aswani et al., 2018; Sokk, 2024; Nyadzi et al., 2021). When elders pass away without their knowledge being preserved, that wisdom is often lost permanently, with it, time-tested responses to health challenges, environmental management, food security, and social cohesion that remain relevant in contemporary Ghana.

This review addresses three interrelated questions. First, what forms of indigenous knowledge do older adults in Ghana maintain, and what makes that knowledge socially significant? Second, what structural and cultural challenges currently prevent its effective intergenerational transmission? Third, what information management strategies can support sustainable preservation while respecting cultural protocols and community ownership?

The argument running through each of these questions is this: durable preservation is a social problem before it is a technological one. No amount of digital archiving or institutional documentation will sustain indigenous knowledge if the community conditions that make that knowledge meaningful continue to deteriorate. Preservation frameworks must invest in the social as much as the technical, place

communities at the centre of decision-making, and reckon honestly with the fact that not all indigenous knowledge is equally valued by the communities that hold it, nor is all of it uniformly beneficial.

Ghana's population of older adults (aged 60 and above) has grown substantially, rising from just over 200,000 in 1960 to nearly two million by 2021 (Ghana Statistical Service, 2021). This demographic shift creates both urgency and opportunity. The urgency is normative: there is a persuasive ethical case that knowledge systems developed over generations, embedded in local languages and ecologies, and tied to the dignity and social authority of elder knowledge holders, deserve active stewardship. The opportunity is practical: systematic preservation efforts, if begun soon and designed with genuine respect for community authority, can still succeed. These are normative arguments about what Ghana should do, not empirical claims about proven rates of knowledge loss, which the current literature does not comprehensively measure.

Ghana's libraries, archives, cultural centres, and research institutions possess infrastructure and expertise that could support this work. Success, however, depends on clear institutional frameworks, ethical principles that centre community rights, and genuine collaboration with knowledge holders and their communities.

Scope and Methodological Approach

This review adopts a narrative approach to synthesising the literature on indigenous knowledge preservation and older adults in Ghana. A narrative review was chosen over a systematic or scoping review for three reasons. First, the topic is inherently interdisciplinary, drawing on information science, gerontology, cultural studies, development studies, and postcolonial scholarship, and a single structured database protocol would systematically undercount contributions from disciplines that use different vocabularies. Second, the review's primary purpose is interpretive synthesis and framework development, not the answering of a single focused clinical or policy question for which systematic review protocols are designed. Third, the existing Ghanaian literature is distributed across grey and institutional sources, doctoral theses, government reports, and institutional repositories, that do not surface reliably through automated database searches. A transparent narrative approach is therefore more epistemologically honest about how this literature was actually gathered than a claimed systematic protocol would be.

Literature was identified through searches of Google Scholar, PubMed, Scopus, and institutional repositories from the University of Ghana, the University of Cape Coast, and Kwame Nkrumah University of Science and Technology. Search terms included combinations of: “indigenous knowledge Ghana,” “traditional knowledge preservation Africa,” “older adults knowledge transmission Ghana,” “intergenerational knowledge Africa,” “oral traditions Ghana,” “digital preservation indigenous knowledge,” “information management Ghana,” and related variants.

Thematic synthesis was conducted using an inductive-deductive hybrid approach. An initial set of broad themes was derived deductively from the three research questions guiding the review. Within each theme, additional sub-themes were allowed to emerge inductively from patterns across the literature. Identified themes were reviewed by the lead researcher through iterative reading until saturation was reached.

The review prioritised scholarship published between 2018 and 2025 to ensure that findings reflect the current state of knowledge and are grounded in contemporary Ghanaian realities. Non-peer-reviewed sources, publications without connection to Ghana or West Africa, and sources not available in English were excluded. Exclusion of non-English sources, while operationally necessary, introduces a potential bias against scholarship published in French (relevant for Francophone West African comparisons) and is acknowledged as a limitation.

A small number of foundational pre-2018 works were retained where they provide either irreplaceable empirical baselines for Ghana’s indigenous knowledge landscape or theoretical foundations that retain unique analytical currency.

No formal quality appraisal instrument was applied to included studies, which is a recognised limitation of narrative reviews. However, the review distinguishes between primary empirical studies, secondary review articles, and institutional or policy documents, and bases empirical claims on the former where possible. Sources that provide only descriptive or normative commentary without primary evidence are used to support conceptual points rather than empirical claims. Readers should interpret this review as a thematically organised synthesis aimed at informing practice and further research, rather than as a systematic mapping of an evidence base.

Conceptual Framework

The UNESCO Intangible Cultural Heritage Safeguarding Framework

The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003), which Ghana ratified in 2004, provides the primary organising framework for this review’s analysis of preservation strategies. The Convention defines intangible cultural heritage as encompassing oral traditions and expressions; performing arts; social practices, rituals, and festive events; knowledge and practices concerning nature and the universe; and traditional craftsmanship. This taxonomy maps directly onto the forms of elder-held indigenous knowledge described in the preceding section.

For preservation purposes, the Convention’s safeguarding approach involves five interrelated activities. Identification and inventorying establish what knowledge exists, who holds it, and which domains are most at risk within specific communities. Documentation and research creates explicit records of tacit knowledge through ethical, community-centred processes. Transmission and education supports the intergenerational learning channels through which knowledge is naturally perpetuated. Revitalisation involves deliberate efforts to reinvigorate practices that have significantly weakened or partially lost their community footing. Protection through policy and institutional frameworks provides the legal and organisational scaffolding that makes the other four activities sustainable. Critically, these five activities form a cyclical and adaptive process rather than a linear sequence; knowledge that is documented but not transmitted will not survive, and transmission that occurs without protection remains vulnerable to external appropriation.

The CARE Principles for Indigenous Data Governance

The CARE Principles for Indigenous Data Governance (Collective Benefit, Authority to Control, Responsibility, and Ethics) (Carroll et al., 2020), provide the ethical and governance architecture within which the UNESCO safeguarding activities should operate. Developed by the International Indigenous Data Sovereignty Interest Group within the Research Data Alliance, and drawing on consultation with indigenous peoples, scholars, non-profit organisations, and governments across multiple continents, the CARE Principles assert four core commitments.

Of the four, Authority to Control is perhaps the most consequential for Ghana’s preservation context,

and the most frequently violated. It asserts that indigenous communities retain inherent authority over their own knowledge, including decisions about what is documented, how it is stored, who has access to it, and how it may be used. This is not an abstract principle. Ghanaian research institutions, libraries, and development organisations have often collected indigenous knowledge through processes in which communities served as informants rather than decision-makers, with the resulting documentation passing into institutional archives that communities cannot easily access, let alone amend or restrict. Authority to Control demands a structural reversal of that relationship: communities as governors, institutions as technical support.

Collective Benefit addresses the question of who gains from preservation work. Data governance frameworks must serve the communities whose knowledge is being preserved, not primarily the careers of researchers, the mandates of development organisations, or the heritage tourism interests of the state. In practice, this means preservation projects should identify, in advance, what concrete value they will return to the community, whether through capacity building, co-authorship, economic arrangements around documented traditional crafts, or simply the return of archive copies in usable formats.

Responsibility and Ethics together address the ongoing obligations of external actors. Responsibility does not end at the point of data collection; researchers, archivists, and practitioners bear continuing obligations to the communities they work with. Ethics demands that all data practices actively prevent harm, including cultural harm, epistemic harm, and the harm that comes from making previously restricted knowledge publicly accessible without community consent.

Together with the UNESCO ICH Framework, the CARE Principles produce a preservation architecture that is community-centred and aligned with Ghana's international obligations. What makes this dual framework analytically useful, rather than merely normatively appealing, is that it provides the vocabulary to distinguish between preservation that genuinely serves communities and preservation that reproduces extractive dynamics under a culturally sensitive banner.

The Forms and Significance of Older Adults as Knowledge Custodians

Traditional Medicine and Herbal Knowledge

Traditional medicine remains central to healthcare provision in Ghana, particularly in rural and peri-urban areas (Ampomah et al., 2023). Older traditional healers and herbalists possess extensive knowledge of medicinal plants, including their identification, preparation methods, therapeutic applications, and the cultural and spiritual protocols that accompany their use. A foundational study by Boadu and Asase (2017) documented that elder practitioners in southern Ghana utilise at least 52 plant species from 28 different families to address 42 distinct diseases and conditions, with expertise extending well beyond plant identification to encompass preparation techniques, appropriate routes of administration, optimal harvesting times, and the ritual dimensions of treatment. In southwestern Ghana, subsequent research similarly documented 70 medicinal tree species used to address 83 different health concerns, with older healers serving as primary custodians of this botanical knowledge (Asigbaase et al., 2024).

Importantly, this knowledge integrates spiritual, social, and physical dimensions of illness in ways that biomedical frameworks do not fully capture (Masango, 2019; Peprah et al., 2022). Apprenticeship systems through which this expertise traditionally passed to successor practitioners have weakened considerably, making elder healers the last formal repositories of knowledge that took decades to develop and that formal training institutions do not currently teach (Ampomah et al., 2023). The Traditional Medicine Practice Act (Act 575, 2000) provides a legal framework for regulating traditional medicine practitioners in Ghana (Parliament of Ghana, 2000), but does not yet systematically address documentation or preservation of the knowledge systems these practitioners hold.

Oral Traditions, Storytelling, and Historical Knowledge

Older adults throughout Ghana are instrumental in maintaining rich oral traditions that serve as vehicles for cultural education, historical documentation, and moral guidance. Among Akan communities, anansesem, Ananse stories featuring the trickster spider character, convey complex moral lessons, encode ethical frameworks for navigating social relationships, and preserve genealogical information crucial to community identity (Abubakari, 2025; Asamoah-Poku, 2024). Adjaye and Aborampah (2004), whose documentation of intergenerational cultural

transmission among the Akan provides an important historical baseline, described elders as the embodiment of the past, responsible for transmitting memories, stories, and moral values across generations.

Oral traditions also encode ecological knowledge. According to Golo et al. (2022), narratives from various Ghanaian communities carry detailed information about seasonal patterns, resource management, and sustainable environmental interactions through ecological proverbs, sacred forest grove preservation practices, and environmental taboos. This knowledge is not separate from the stories themselves; it is woven into narrative form precisely because that form makes it memorable and transmissible. The Ga-Dangbe community's blood culture practices and their associated rituals are passed down orally, maintaining cultural specificity across generations (Tetteh-Quaynor et al., 2024), while Fiasidi initiation rites in Klikor involve verbally transmitted ceremonies that prepare young women for their ritual responsibilities and reinforce cultural identity (Azaglo et al., 2024).

Agricultural Knowledge and Climate Change Adaptation

Older farmers possess extensive indigenous agricultural knowledge that has direct relevance for adapting to climate change (Siakwah et al., 2025; Sedegah et al., 2023). This knowledge includes traditional farming techniques, knowledge of local crop varieties resilient to specific environmental conditions, sustainable land management practices, and a sophisticated understanding of weather patterns based on generations of direct observation (Adom, 2022). In Northern Ghana, older farmers maintain indigenous weather prediction systems based on observation of natural indicators, including vegetation growth patterns, animal behaviour, and atmospheric conditions, that provide early warning of flood seasons and extreme weather events (Nyadzi et al., 2021). These systems remain locally relevant precisely because they are calibrated to specific micro-environments that general meteorological models do not capture in sufficient detail.

The intergenerational transmission of this knowledge is deeply practical in character, occurring through shared work, guided observation, and the correction of mistakes in real agricultural settings. Siakwah et al. (2025) document how peasant farmers in Ghana continue to acquire and adapt indigenous climate knowledge through direct experience and

community interaction, even as formal agricultural extension services push competing approaches. Importantly, this is not simply historical knowledge; it is actively adapted by elder practitioners in response to changing conditions.

Governance Systems and Conflict Resolution

Older community members, particularly traditional authorities, maintain knowledge of indigenous governance and conflict resolution mechanisms honed over generations (Essel, 2021). These systems provide culturally appropriate approaches to mediating disputes, addressing grievances, and fostering community cohesion, often complementing and, in some respects, outperforming formal legal systems in terms of community acceptance and the durability of outcomes (Heto & Mino, 2022). The application of indigenous peace mechanisms, including customary mediation, negotiation, and reconciliation processes, in addressing the Dagbon conflict illustrates the ongoing practical relevance of this knowledge (Osei, 2024; Issifu & Bukari, 2022). Traditional leaders also hold knowledge of customary regulations governing sustainable resource use, including taboos that restrict hunting, tree cutting, or harvesting during particular seasons or in designated areas (Bardy et al., 2022). Embedded in spiritual and cultural beliefs, these regulations have historically been effective in preventing resource overexploitation (Anokye & Mohammed, 2024; Swathi & Dhayalakrishnan, 2025).

Gender Dimensions of Knowledge Custodianship

Any account of elder knowledge custodianship in Ghana that treats older adults as an undifferentiated category risks obscuring important gender differences in what knowledge is held, how it is transmitted, and who is recognised as a legitimate knowledge authority. Female elders are primary custodians of significant knowledge domains that receive comparatively little attention in the preservation literature. These include knowledge of traditional birth practices and maternal health management; food preparation, preservation, and food system management; textile traditions including kente weaving and fabric dyeing; household-based healing practices; and the day-to-day knowledge of plant resources, soils, and water sources that underpins subsistence agriculture in rural communities.

The gendered dimensions of knowledge access and transmission are not merely additive to the

preservation challenge; they shape it structurally. In contexts where knowledge transmission follows patrilineal lines, female-held knowledge may pass through different social networks and be less likely to be targeted by formal documentation efforts. Bello (2025), examining indigenous drumming in Ghana, documents how historical marginalisation of women from specific knowledge domains has shaped what community memory records and what it forgets. Preservation initiatives that work exclusively through traditional authority structures, most of which are male-dominated in many Ghanaian communities, may systematically reproduce this erasure. Inclusive preservation design must therefore actively seek out female knowledge holders and create documentation and transmission processes that respect the social contexts in which women's knowledge is held and shared

Mechanisms of Knowledge Transmission

Indigenous knowledge in Ghana is transmitted primarily through informal, culturally embedded mechanisms rather than formal curricula or written materials, with older adults serving as central teachers and role models (Dei, 2024; Agyepong, 2017). These mechanisms include oral traditions and storytelling, apprenticeship and guided observation, participation in community practices and ceremonies, and mentorship relationships. Bonney et al. (2025) argue that these represent not merely pedagogical techniques but forms of cultural wealth, practices through which communities reproduce their identities across time.

Apprenticeship and observation are particularly important for practical knowledge domains. Adam et al. (2025) document how indigenous knowledge on the propagation of native tree species in Ghana, including *Adansonia digitata* and *Parkia biglobosa*, is preserved through local knowledge passed through direct mentorship in community settings. Azaglo et al. (2024) note that participation in community rituals and ceremonies embeds knowledge in lived social experience, making it durable precisely because it is not abstract information but part of how community life is conducted. Slavova and Metiu (2022) document the role of ritual interactions, including prayer, donation, and storytelling, in bridging community members and development practitioners in rural Ghana, showing how knowledge transmission is also a relational and ceremonial process.

Why Elder-Held Indigenous Knowledge Matters, and Why Preservation Is Not Straightforward

Indigenous knowledge held by elders offers practical solutions to health, food security, environmental management, and social cohesion challenges. It stabilises cultural identity and binds communities together across generations. It represents a form of accumulated intelligence adapted to specific places and conditions over very long periods of time, intelligence that formal scientific knowledge systems developed in very different contexts do not automatically replicate. These are genuine and substantial reasons to invest in preservation.

But preservation is not a simple or unambiguously positive undertaking, and this review would be intellectually incomplete if it did not acknowledge the complications. Indigenous knowledge systems are internally heterogeneous. Not all knowledge held by elders is equally beneficial, nor is it uniformly valued by the communities that hold it. Some traditional medical knowledge, for instance, involves practices that delay biomedical care-seeking or use substances with documented toxicity. Some oral traditions encode inter-ethnic hostilities. Some indigenous governance knowledge reflects and reproduces patriarchal or gerontocratic authority structures. A preservation agenda that treats all indigenous knowledge as equally worthy of protection, without creating space for community deliberation about what should be preserved, on what terms, and for whose benefit, risks becoming an exercise in the romanticisation of tradition rather than a genuinely community-centred service.

There is also a well-documented risk that documentation processes, however well-intentioned, can themselves become forms of extraction. Tuck and Yang (2012) caution against “moves to innocence” in social justice frameworks, the adoption of decolonial language and gestures that do not actually transfer power to the communities they claim to serve. A documentation project that recruits community members as informants, sends their knowledge to institutional archives controlled by universities or government bodies, and returns nothing substantive to the community may dress itself in the language of preservation while reproducing colonial knowledge extraction in a new register. This is not a hypothetical risk; it is documented in the ethnographic literature on development-oriented indigenous knowledge projects across Africa (Couldry & Mejias, 2019).

The implication is not that preservation should not happen. It is that preservation frameworks must build in community deliberation about what is worth

preserving, accountability mechanisms that ensure communities retain authority over their knowledge after documentation, and genuine benefit-sharing that returns value to knowledge holders. The frameworks guiding this review, the UNESCO ICH Safeguarding Framework and the CARE Principles, are oriented toward exactly these requirements

Challenges to Indigenous Knowledge Preservation in Ghana

Socio-cultural Transformation and Generational Disconnect

Ghana's encounter with Western education, urbanisation, and global consumer culture has fundamentally altered the social conditions supporting indigenous knowledge transmission (Opare, 2016). Younger generations increasingly pursue formal education in schools that centre Western knowledge systems and largely ignore indigenous approaches. Urban migration removes young people from the rural contexts where indigenous knowledge is most actively practised (Nyadzi et al., 2021). Western cultural values — emphasising individual achievement, monetary income, and technological modernity — can appear more prestigious or economically viable than traditional practices to young people who have very rational reasons for prioritising formal employment pathways.

This generational disconnect, where it exists, is not primarily a failure of values on the part of young Ghanaians. It is better understood as a structural outcome of educational and economic systems that do not incentivise engagement with indigenous knowledge. Young people who cannot earn a living through traditional apprenticeship, who are not compensated for the years required to learn traditional healing or weaving, and who face school curricula that never acknowledge the value of what their grandparents know, are responding rationally to the incentive structures they face. The problem is in the architecture, not the people.

This has a direct implication for preservation strategy. Interventions that frame youth disengagement as a cultural attitude to be corrected, through awareness campaigns or heritage promotion, will fail. Structural responses are needed: apprenticeship schemes that provide financial support, curricula that integrate indigenous knowledge, and economic arrangements that make engagement with traditional practices viable rather than merely sentimental.

Migration, Urbanisation, and Community Fragmentation

Rural-to-urban migration disrupts the geographical and social contexts that support knowledge transmission. Nyadzi et al. (2021) document that indigenous knowledge is disappearing because of modernisation and rural-urban migration, changing landscapes, and shifting religious beliefs. As Derbile and Laube (2014) demonstrated in north-eastern Ghana, knowledge flows are highly dependent on kinship and spatial proximity. When the social fabric through which knowledge travels is dispersed across hundreds of kilometres between rural origin communities and urban destinations, transmission weakens even where both parties remain willing. Heto and Mino (2022) document precisely this dynamic: rural-urban migration creates discontinuities in community knowledge systems that persist across generations.

Environmental change compounds the problem. Addaney et al. (2022) document that forced displacement in Ghana's upper regions, driven by harsh climatic and environmental conditions, is pushing minority linguistic groups toward southern urban centres, where their cultures and languages face the additional threat of submersion within dominant linguistic communities. This north-south migration pattern directly undermines the preservation of knowledge systems embedded in local languages and place-specific ecological relationships.

What the literature makes plain, but rarely states directly, is that migration-driven knowledge loss is both a cultural problem and a climate problem. As environmental degradation in Northern Ghana accelerates, the displacement of knowledge-bearing communities will accelerate with it. Preservation strategies designed only for stable, settled communities will be inadequate.

Digital Divides and Technological Challenges

The digital divide in Ghana, the gap between those with reliable access to technology and those without, severely limits the documentation of tacit knowledge held by elderly rural knowledge keepers (Dei et al., 2025). Infrastructural barriers, including inconsistent electricity supply and poor internet connectivity in rural areas, prevent many communities from using digital tools to archive their traditions (Boatbil et al., 2025; Kpedekpo, 2024). Without stable access to digital storage and adequate bandwidth, rich oral histories remain undocumented.

The digital divide is not only infrastructural but epistemic. As Boatbil et al. (2025) note, linguistic and epistemic marginalisation are reinforced when digital documentation efforts are conducted primarily in English, effectively excluding those who relate to their culture through indigenous languages. The proliferation of globalised media has simultaneously contributed to a generational shift in cultural reference points, with younger Ghanaians' digital engagement dominated by foreign content in ways that have reduced interest in indigenous cultural practices (Anim et al., 2022).

Then there is a deeper risk that technological optimism tends to obscure. The swift digitisation of heritage by external parties, whether research institutions, development organisations, or private platforms, creates conditions for cultural appropriation and commodification that community members may not anticipate at the point of participation. Couldry and Mejias (2019) describe this as a form of “data colonialism,” in which the digital economy extracts value from traditional symbols, stories, and knowledge systems for profit without the consent, control, or benefit of the original custodians. Without established indigenous data sovereignty frameworks in Ghana, the digital infrastructure that is meant to preserve indigenous knowledge can become the mechanism for its extraction. This is the central governance challenge that any technology-forward preservation strategy must answer, not an afterthought to it.

Language Endangerment and Decline of Oral Traditions

The relationship between language and oral traditions is one of mutual reinforcement: the erosion of one accelerates the decline of the other. Many local languages throughout Ghana are becoming extinct within a generation or two, driven by media, formal education, internal community dynamics, and socioeconomic pressures (Dompey & Baidoo, 2024; Adjei et al., 2022). Because oral traditions encode meaning through specific linguistic structures, tonal variations, idiomatic expressions, proverbs, and metaphors that do not translate cleanly into English, the shift toward English as the dominant language of education and upward mobility leads to a loss of semantic content, not just linguistic form.

This language shift is reinforced by urbanisation and rural migration, which break the physical proximity and temporal investment needed for intergenerational learning with elders. In the transmission of traditional

medicinal knowledge, for example, migration of youth to urban centres means they can no longer participate in the long-term place-based apprenticeships necessary to master complex oral systems of harvesting and healing (Ouma, 2022). Ezema (2025) characterises oral traditions as a community's “collective memory bank” — a characterisation that is accurate as far as it goes, but understates the point. When a language dies, communities lose not just stored information but the cognitive and social infrastructure through which that information was made meaningful, questioned, updated, and transmitted. Documentation in English can preserve the content of an oral tradition in translation. It cannot preserve the tradition itself.

Economic and Livelihood Constraints

Economic pressures shape knowledge preservation in ways that culturally focused analyses often overlook. In Ghana, traditional knowledge practices and the foods, crafts, and methods associated with them are frequently stigmatised as “foods of the poor” or practices of the underdeveloped, creating status disincentives for engagement (Allotey et al., 2024). Persistent poverty and inadequate social infrastructure function as push factors that compel individuals to migrate from rural to urban areas, weakening the community ties through which traditional knowledge passes (Abedi-Lartey, 2016).

The case of *galamsey*, illegal artisanal gold mining, illustrates the ecological dimension of this economic pressure with unusual clarity. In regions like the Western Region, *galamsey* has ravaged forests and contaminated waterbodies, destroying the ecosystems that support traditional fishing, farming, and medicinal plant gathering (Owusu-Nimo et al., 2018). This matters for preservation because indigenous knowledge is not abstract: it is knowledge of specific plants in specific places, of specific water sources, of specific seasonal patterns in specific micro-environments. Destroy the ecosystem and you destroy the referent of the knowledge, even if the words of the tradition survive, they describe a world that no longer exists. The communities engaging in *galamsey* are not enemies of their own knowledge traditions; they are communities in poverty responding to immediate survival pressures. Addressing those pressures is therefore a prerequisite, not an alternative, to effective knowledge preservation.

Information Management Strategies for Indigenous Knowledge Preservation

Organised around the five UNESCO safeguarding activities, with the CARE Principles providing governance across each, the following strategies represent a synthesis of what the current literature identifies as the most effective and ethically grounded approaches to preserving elder-held indigenous knowledge in Ghana.

Identification and Inventorying: Mapping What Exists

The first step in any preservation effort is knowing what knowledge exists, who holds it, how it is currently being transmitted, and which domains are most fragile. Community-based knowledge inventories serve this function. When designed participatorily, with community members identifying which elders hold what knowledge, and with those elders reviewing and approving what is recorded, inventories also serve as an initial act of community authority over the preservation process itself.

Practically, this might involve facilitating community mapping exercises where elders and community members collaboratively document knowledge domains, holders, and transmission channels. Afful-Arthur et al. (2022) note that academic libraries in Ghana have both the awareness of this need and the basic resources to support knowledge organisation, but need to adopt more proactive and community-facing approaches. The Institute of African Studies at the University of Ghana (Legon) and the Public Records and Archives Administration Department (PRAAD) have existing archival and documentation programmes that could be adapted and extended to support community inventorying processes.

Inventorying should produce not just a list of knowledge types, but a community-endorsed prioritisation of what is most at risk and most urgently in need of systematic preservation attention. That prioritisation decision belongs to communities, not institutions. Getting this right at the inventorying stage determines whether everything that follows has legitimacy.

Documentation and Research: Ethical Recording of Knowledge

Documentation involves converting tacit, embodied knowledge into explicit forms that can be preserved, shared, and returned to communities. This includes audio and video recording of elders

demonstrating practices, narrating oral histories, or performing rituals; transcription of recorded knowledge into written texts in local languages as well as English; visual documentation through photographs and diagrams; and the creation of digital archives with appropriate metadata, indexing, and access controls.

Documentation must be undertaken with rigorous ethical care. According to Okolo (2024), oral traditions and their intercultural relations can find a home in technology for retrieval and sharing, but only when the technology serves community purposes. The CARE Principles require that documentation be conducted with communities' free, prior, and informed consent; that communities have the opportunity to review, revise, and in some cases withhold documentation from broader dissemination; and that the resulting archives remain under community authority rather than passing into institutional ownership. These requirements have international legal force: Article 31 of the United Nations Declaration on the Rights of Indigenous Peoples (UN, 2007) specifically affirms the rights of indigenous peoples to maintain, control, protect, and develop their cultural heritage, traditional knowledge, and traditional cultural expressions. Documentation processes must respect rather than circumvent these rights, and must be designed from the outset in ways that make compliance verifiable.

Documentation must also be multilingual. Knowledge encoded in local languages, Twi, Ewe, Dagbani, Ga, Nzema, and others, carries meaning through linguistic structures that do not survive translation into English intact. Digital documentation platforms should therefore support local language recording, transcription, and metadata. The underdevelopment of natural language processing tools for Ghanaian languages is a current constraint that calls for investment in local computational linguistics capacity.

Transmission and Education: Keeping Knowledge Living

Documentation and archiving can capture knowledge, but cannot keep it alive. Knowledge that is recorded and filed but never used, never taught, and never incorporated into ongoing community life is preserved only in the thin sense that a museum exhibit preserves an artefact, as an object of study rather than as a living practice. The most important preservation strategy is therefore not documentation but the strengthening of the social conditions through which

knowledge is naturally transmitted: apprenticeships, mentorship relationships, storytelling gatherings, community work projects, and ritual participation.

Research on successful transmission consistently finds that young people are more likely to learn and value indigenous knowledge when they see it as practically useful, when their engagement with elders is respected and recognised, and when meaningful relationships with knowledge-holding elders are available (Bird-Naytowhow et al., 2017; Douglas, 2015). This suggests that interventions should focus on creating conditions for meaningful intergenerational relationships rather than on designing instructional programmes. These are not the same thing. Practical steps include creating apprenticeship schemes in which young people receive financial support or formal recognition while learning traditional skills from elders; supporting community storytelling events and cultural festivals where oral knowledge is shared in culturally appropriate settings; and advocating for the integration of indigenous knowledge into school curricula, which Gyamerah (2025) argues could help transform STEM education by introducing students to African ways of understanding the natural world.

Adom (2022) demonstrates the particular value of involving children in biodiversity projects as a vehicle for indigenous ecological knowledge transmission, with elder knowledge holders serving as guides and teachers in environmental contexts rather than as subjects of institutional documentation. This kind of intergenerational learning-by-doing is consistent with how indigenous knowledge has always been transmitted, and it is more likely to produce genuine uptake than formal programmes that simulate apprenticeship in a classroom.

Revitalisation: Recovering What Has Weakened

For knowledge practices that have already declined significantly, where most of the younger generation has no exposure and elder practitioners are few, more deliberate revitalisation efforts are needed alongside transmission strengthening. Revitalisation differs from transmission in that it addresses knowledge practices no longer in active circulation, requiring intentional reconstruction as well as reinforcement.

Community-led assessment is essential here: communities themselves need to identify which practices they want to revitalise and why, rather than external researchers or institutions deciding what is worth recovering. The CARE Principles' commitment to collective benefit and community authority applies

with particular force to revitalisation, because there is a real risk that efforts to recover "lost" practices serve scholarly or heritage tourism interests more than community interests. Diaspora engagement is also relevant in the Ghanaian context: community members living in urban centres, including internationally, often maintain an interest in and connection to origin-community practices that formal revitalisation programmes could usefully mobilise, facilitating reconnection with elders whose knowledge has found no local successors.

Boatbil et al. (2025) document how artisans in Ghana's Upper East Region are working to preserve traditional craft knowledge, including bead-making and basketry, through community-based workshops and mentorship structures. These efforts are modest in scale. But they are community-owned, economically grounded, and linked to existing cultural institutions. That combination, rather than any particular technical feature, is what makes them worth replicating.

Protection and Governance: Applying the CARE Principles

All four preceding strategies depend on a robust governance and legal protection framework that ensures communities retain authority over their knowledge and that preservation efforts do not expose that knowledge to commercial exploitation or misrepresentation. The CARE Principles provide the ethical architecture for this framework; what is needed is its operationalisation through policy and institutional mechanisms.

Ghana's National Cultural Policy and its obligations under the UNESCO ICH Convention provide existing entry points for this work. The National Ageing Policy (2010), while primarily concerned with welfare and social protection (Ministry of Gender, Children and Social Protection, 2010), implicitly recognises the social and cultural roles of older adults that a dedicated addendum on knowledge custodianship could make explicit. The Traditional Medicine Practice Act (Act 575, 2000) regulates the practice of traditional medicine but does not currently address the documentation or protection of the knowledge systems that practitioners hold, a gap that an amendment could address, building in benefit-sharing requirements and documentation protocols that require community consent.

On intellectual property, Ghana needs clearer frameworks protecting indigenous knowledge from commercial appropriation without community

benefit-sharing. The risk documented by Couldry and Mejias (2019), that digital platforms owned by foreign corporations may extract, commodify, and profit from documented traditional knowledge without community consent or benefit, is not merely theoretical. Community-controlled digital archives, ideally hosted within Ghanaian institutional infrastructure, are preferable to cloud-based solutions governed by foreign legal jurisdictions. Ghana's existing library and archival institutions, the Ghana Library Authority, the National Commission on Culture, the Institute of African Studies, could collectively develop the infrastructure for such archives, with appropriate governance frameworks ensuring that the communities whose knowledge is archived retain access, amendment rights, and veto power over secondary use.

Critical Research and Implementation Gaps

Indigenous Data Sovereignty in the Ghanaian Context

While the concept of indigenous data sovereignty has gained significant traction internationally, anchored in frameworks like the CARE Principles (Carroll et al., 2020) and UNDRIP (UN, 2007), its application in Ghana and across Sub-Saharan Africa remains nascent. Community members currently have limited understanding of their rights over documented knowledge, and institutional actors, including libraries, universities, and research bodies, lack coherent protocols for implementing community data sovereignty in practice. Natural language processing technologies remain underdeveloped for Ghanaian languages, limiting the creation of searchable, community-navigable archives. These technical and institutional gaps are simultaneously research problems and infrastructure challenges, and closing them will require sustained investment rather than one-off project funding.

Gerontological Perspectives on Knowledge Transmission

The preservation literature largely treats elder knowledge holders as categories defined by what they know rather than as ageing persons with specific social, cognitive, and relational dimensions that shape their capacity and willingness to transmit knowledge. This is a significant blind spot. Apt (1996), whose foundational study of older adults in Ghana documented the erosion of traditional support systems and the changing social position of elders in a modernising society, argues that understanding the social position of older adults is

essential to understanding anything they do, including how and whether they choose to transmit their knowledge.

A gerontologically informed preservation agenda would ask not only "what do elders know?" but "under what conditions are elders willing and able to share it?" and "what social recognition and material support do elder knowledge holders currently receive?" Health, isolation, and reduced social status in late life all affect transmission willingness. These questions have not been adequately addressed in the Ghanaian preservation literature. Treating elders as knowledge repositories to be harvested before they die is both ethically inadequate and practically counterproductive: elders who feel exploited or disrespected do not share their most sensitive knowledge.

Interdisciplinary Collaboration

Current preservation efforts frequently operate in disciplinary silos, with information scientists, gerontologists, cultural researchers, and development practitioners working on related problems without adequate coordination. Information scientists bring expertise in knowledge organisation, metadata, and archival systems. Gerontologists bring understanding of ageing, elder social roles, and intergenerational dynamics. Cultural scholars bring attention to meaning, context, and the politics of representation. Community development practitioners bring established relationships and understanding of local priorities. None of these perspectives is sufficient alone, and the gaps between them are where most preservation initiatives currently fail. Interdisciplinary research partnerships, ones that include community members as genuine partners rather than subjects of study, are necessary to produce frameworks that work across their technical, social, and political dimensions simultaneously.

Implications and Recommendations

Policy Implications

Ghana already has policy commitments that provide entry points for more systematic indigenous knowledge preservation. Under the UNESCO Convention on Intangible Cultural Heritage (ratified 2004), Ghana is obligated to develop inventories, support safeguarding measures, and promote awareness of intangible cultural heritage. The National Cultural Policy and the National Ageing Policy (2010) together recognise both the cultural value of traditional practices and the social importance of older adults,

but neither currently provides specific mechanisms for knowledge documentation or preservation. A review of both policies, with the explicit aim of building in indigenous knowledge preservation mandates, community governance frameworks, and dedicated funding lines, is warranted.

Intellectual property protections for traditional knowledge need strengthening, with particular attention to clarifying ownership rights and creating benefit-sharing mechanisms that ensure communities benefit when their knowledge is commercialised. Frameworks drawing on the CARE Principles and UNDRIP Article 31 should guide this policy development. Institutional resources (staff, infrastructure, and budgets) at the Ghana Library Authority, PRAAD, the National Commission on Culture, and university institutes need to be explicitly directed toward community-facing preservation work.

Practice Implications

Practitioners engaged in preservation work should invest first in relationships and trust, not in documentation technologies. Communities that trust the practitioners working with them are more likely to share knowledge openly, to participate in documentation processes, and to remain engaged with preservation projects over the long term. Communities that do not trust practitioners will, correctly, withhold their most sensitive knowledge regardless of how sophisticated the documentation tools available.

Documentation projects should be led by community members, with external support in technical areas where community capacity is genuinely lacking. This is not merely an ethical preference; it produces better outcomes, because community members understand the cultural context of what is being documented in ways that external researchers typically do not. Benefit-sharing arrangements should be negotiated transparently before documentation begins, not retrospectively after archives are created. Practitioners should also invest in strengthening traditional transmission mechanisms, apprenticeships, storytelling, and ritual participation, recognising that sustainable preservation ultimately depends on knowledge remaining alive in community practice rather than existing only in archives.

Research Implications

Research is needed on the integration of indigenous knowledge with emerging technologies in ways that respect data sovereignty and serve community

interests. Studies should examine how the CARE Principles can be operationalised within Ghanaian institutional contexts. Research should also investigate the conditions under which elder knowledge holders are willing and able to transmit knowledge, addressing the gerontological gap identified above, and what support systems enable continued transmission in the face of declining social status, health constraints, and geographic dispersal of potential successors. The climate change adaptation nexus merits particular attention: as indigenous agricultural and ecological knowledge becomes increasingly relevant to climate adaptation policy, research on how this knowledge can be integrated into formal climate adaptation frameworks could significantly elevate both the value and the profile of preservation work.

Conclusion

Older adults throughout Ghana maintain sophisticated, practical knowledge systems developed over generations of interaction with specific environments and cultural contexts. This knowledge addresses real challenges in health, food security, environmental management, and social cohesion. It is rooted in local languages, embedded in community relationships, and held by people whose social authority as elders gives it legitimacy and transmissibility. It deserves active stewardship.

But preservation is not straightforward. Not all indigenous knowledge is equally beneficial or universally valued within the communities that hold it. Preservation frameworks that do not create space for community deliberation risk entrenching whatever power structures currently control knowledge access. Documentation processes that transfer community knowledge into institutional archives without adequate community governance risk reproducing, under a culturally sensitive banner, the same extractive dynamics that colonial knowledge systems established. The frameworks guiding this review, the UNESCO ICH Safeguarding Framework and the CARE Principles for Indigenous Data Governance, are designed precisely to guard against these risks, by placing community authority and collective benefit at the centre of preservation design.

Effective preservation requires systematic information management strategies that respect cultural protocols, centre community participation and ownership, and integrate traditional transmission methods with contemporary tools. It requires institutional commitment and adequate resources,

deployed through existing Ghanaian policy frameworks including the National Cultural Policy, the National Ageing Policy, the Traditional Medicine Practice Act, and Ghana's UNESCO ICH obligations. Most fundamentally, it requires recognising older adults not as passive repositories of data to be extracted before they pass away, but as active knowledge governors with the right to determine what is preserved, how, and for whom.

References

- Abedi-Lartey, J. (2016). Causes of rural-urban migration on Sankana in Nadowli-Kallo district of Ghana and its' effect on Community Development. *theseus.fi*
- Abubakari, H. (2025). Folktales for Environmental Conservation: From Oral Traditions to Ecological Wisdom. *African Studies*, 1–20. <https://doi.org/10.1080/00020184.2025.2523518>
- Adam, A.-A., Doke, D. A., Hansen, R. R., Lykke, A. M., Abagale, F. K., & Quainoo, A. K. (2025). Assessment of indigenous knowledge on propagation of native trees in the agro-ecological zone of Ghana. *Agroforestry Systems*, 99(8). <https://doi.org/10.1007/s10457-025-01318-1>
- Addaney, M., Yegblemenawo, S. A. M., Akudugu, J. A., & Kodua, M. A. (2022). Climate change and preservation of minority languages in the upper regions of Ghana: A systematic review. *Chinese Journal of Population, Resources and Environment*, 20(2), 177–189.
- Adjaye, J. K., & Aborampah, O. M. (2004). Intergenerational cultural transmission among the Akan of Ghana. *Journal of Intergenerational Relationships*, 2(3-4), 23–38.
- Adjei, P. Y., Okrah, E. K., Oppong-Agyei, B., & Asante, E. (2022). Saving the Ga-Dangme language from extinction—a corroborative study. *European Journal of Applied Linguistics Studies*, 5(1).
- Adom, D. (2022). Catch them young: Children as bearers of indigenous ecological knowledge for biodiversity conservation in Ghana. *Journal of Wildlife and Biodiversity*, 6(3), 12–25.
- Afful-Arthur, P., Kwafoa, P. N. Y., Ampah-Johnston, M., & Mensah, V. (2022). Managing and accessing indigenous knowledge for national development: The role of academic libraries in Ghana. *Information Development*, 38(4), 535–548.
- Agyepong, A. O. (2017). Indigenous communication: A narrative of selected indigenous practices of the Akan group of Ghana. In *Handbook of research on theoretical perspectives on indigenous knowledge systems in developing countries* (pp. 411–421). IGI Global Scientific Publishing.
- Allotey, S. S. K., Mohammed, F., & Lamptey, C. Y. (2024). Assessing the perception and accessibility of indigenous foods within Northern Ghanaian communities. *Global Scientific Journal*, 12(11), 324.
- Ampomah, I. G., Malau-Aduli, B. S., Seidu, A. A., Malau-Aduli, A. E., & Emeto, T. I. (2023). Integrating traditional medicine into the Ghanaian health system: Perceptions and experiences of traditional medicine practitioners in the Ashanti region. *International Health*, 15(4), 414–427.
- Anim, A., Oppong, S., Geraldo, S., Gariba, M. S., Obeng, R., Ocran, P. A., & Odonkor, S. N. (2022). The Effects of Globalized Media on Northern Cultures: A Case Study of Dagomba, Frafra and Wala Ethnic Groups in Tamale Metropolis. *Journal of Social and Development Sciences*, 13(1), 15–35.
- Anokye, K., & Mohammed, A. S. (2024). Indigenous traditional knowledge for cleaner waste systems and sustainable waste management system in Ghana. *Cleaner Waste Systems*, 9, 100165. <https://doi.org/10.1016/j.clwas.2024.100165>.
- Apt, N. A. (1996). *Coping with old age in a changing Africa: Social change and the elderly Ghanaian*. Avebury
- Asamoah-Poku, F. (2024). Preserving Traditional Ghanaian Folklore through Storytelling. *European Modern Studies Journal*, 8(2), 308–318. [https://doi.org/10.59573/emsj.8\(2\).2024.26](https://doi.org/10.59573/emsj.8(2).2024.26)
- Asigbaase, M., Adusu, D., Musah, A. A., Anaba, L., Nsor, C. A., Abugre, S., & Derkyi, M. (2024). Ethnobotanical and ethnopharmacological survey of medicinal tree species used in the treatment of diseases by forest-fringe communities of Southwestern Ghana. *Heliyon*, 10(1), 1–15.
- Aswani, S., Lemahieu, A., & Sauer, W. H. (2018). Global trends of local ecological knowledge and future implications. *PloS one*, 13(4), e0195440.
- Azaglo, A. K., Adom, D., Kquofi, S., & Ebeheakey, A. K. (2024). A Religio-Cultural Inquiry into the Spiritual Journey of a Fiasidi through Initiation

- Rites at the Trokosi Shrines in Klikor, Ghana. *E-Journal of Humanities, Arts and Social Sciences*, 1527–1542. <https://doi.org/10.38159/ehass.2024588>
- Bardy, R., Akolgo-Azupogo, H., & Rubens, A. (2022). The role of tribal leaders/traditional leaders in regulating land use and biodiversity among the Gurune-speaking people of the Upper East Region in Ghana. *Advances in Environmental Engineering Research*, 3(3), Article 036. <https://doi.org/10.21926/aeer.2203036>
- Bawa, S., Benin, I. W., & Yongping, X. (2025). Digital innovation and knowledge management involvement: A study of Ghana's economy. *Kybernetes*.
- Bello, M. (2025). Gender and cultural regeneration in indigenous drumming in Ghana: towards a gender-inclusive, regenerative cultural policy rethinking. *International Journal of Cultural Policy*, 31(4), 534–550. <https://doi.org/10.1080/10286632.2025.2470818>
- Bird-Naytowhow, K., Hatala, A. R., Pearl, T., Judge, A., & Sjoblom, E. (2017). Ceremonies of Relationship: Engaging Urban Indigenous Youth in Community-Based Research: Engaging Urban Indigenous Youth in Community-Based Research. *International Journal of Qualitative Methods*, 16(1). <https://doi.org/10.1177/1609406917707899>
- Boadu, A. A., & Asase, A. (2017). Documentations of herbal medicines used for the treatment of human diseases by some communities in southern Ghana. *Evidence-Based Complementary and Alternative Medicine*, 2017, 3043061.
- Boatbil, C. S., Baada, F., Akonga, S., & Ayoung, D. A. (2025). Preserving indigenous knowledge for development in northern Ghana: Exploring the views of artisans in the art and craft industry in the Upper East Region. *African Quarterly Social Science Review*, 2(3), 251–262.
- Bonney, E. N., Campbell, A. A., Fusheini, A., & Adesina, K. A. (2025). Cultural wealth as pedagogy: Elders' knowledge and community engagement in sustaining linguistic and cultural heritage. *International Journal of Qualitative Studies in Education*, 1–21. <https://doi.org/10.1080/09518398.2025.2502059>
- Briggs, J., & Moyo, B. (2012). The resilience of indigenous knowledge in small-scale African agriculture: Key drivers. *Scottish Geographical Journal*, 128(1), 64–80.
- Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. *Television & New Media*, 20(4), 336–349.
- Dei, D. G. J. (2024). Strategies for capturing, managing, and sharing indigenous knowledge. *Information Development*. <https://doi.org/10.1177/02666669241248832>
- Dei, D. G. J., Dzandza Ocloo, P. E., Anane-Donkor, L., Peasah-Aidoo, T. E., & Asamoah, C. (2025). Leveraging information technology and systems for the sustainable management and preservation of indigenous knowledge. *Information Development*, 02666669251370351.
- Derbile, E. K., & Laube, W. (2014). Local knowledge flows for reducing vulnerability of rain-fed agriculture to environmental change: Patterns and drivers of flow in North-Eastern Ghana. *Information and Knowledge Management*, 4(7), 24–38
- Dompey, P. E., & Baidoo Jnr, F. (2024). Factors contributing to the decline of Animere language in Ghana. *SSRN Electronic Journal*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4888198
- Douglas, J. (2015). Kin and knowledge: The meaning and acquisition of Indigenous ecological knowledge in the lives of young Aboriginal people in Central Australia. Charles Darwin University (Australia).
- Essel, E. A. (2021). The role of traditional leaders in governance structure through the observance of taboos in Cape Coast, Kumasi and Teshie societies of Ghana. *International Relations*, 9(03), 122–135.
- Ezema, C. A. (2025). The role of language in preserving oral traditions: A critical literature review. *Port Harcourt Journal of History & Diplomatic Studies*, 12(1), 259–286
- Ghana Statistical Service. (2021). 2021 Population and Housing Census: Summary Report of Final Results.
- Golo, B. W. K., Majeed, H. M., & Myles, N. O. (2022). Akan religious ontology and environmental sustainability in Ghana. *Worldviews*, 27(1-2), 86–114.
- Gyamerah, K. (2025). Rethinking the potential role of African Indigenous knowledge systems in transforming STEM education. *Diaspora*,

- Indigenous, and Minority Education, 1-13.
- Heto, P. P. K., & Mino, T. (2022). (Dis)continuity of African Indigenous knowledge. *AlterNative: An International Journal of Indigenous Peoples*, 19(1), 71–79. <https://doi.org/10.1177/11771801221138304>
- Issifu, A. K., & Bukari, K. N. (2022). (Re)thinking homegrown peace mechanisms for the resolution of conflicts in Northern Ghana. *Conflict, Security & Development*, 22(2), 221–242.
- Kpedekpo, B. (2024). *Heritage Through Pixels: Digitization of Ghana's Cultural Heritage with the Aim of Increasing Engagement and Participation Amongst the Youth* (Doctoral dissertation, University of British Columbia).
- Masango, C. A. (2019). Indigenous knowledge codification of African traditional medicine: Inhibited by status quo based on secrecy? *Information Development*, 36(3), 327–338. <https://doi.org/10.1177/0266666919853007>
- Ministry of Gender, Children and Social Protection. (2010, July 17). National ageing policy: “Ageing with security and dignity”. <https://www.mogcsp.gov.gh/mdocs-posts/national-ageing-policy-ageing-with-security-and-dignity/>.
- Muir, C., Rose, D., & Sullivan, P. (2010). From the other side of the knowledge frontier: Indigenous knowledge, social–ecological relationships and new perspectives. *The Rangeland Journal*, 32(3), 259–265.
- Nyadzi, E., Ajayi, O. C., & Ludwig, F. (2021). Indigenous knowledge and climate change adaptation in Africa: a systematic review. *CABI Reviews*, (2021).
- Okolo, C. F. (2024). Digitization of African verbal arts. *International Journal of Research and Innovation in Social Science*, 8(9), 1602–1609.
- Opore, S. (2016). Challenges of preserving indigenous ecological knowledge through intergenerational transfer to youth. *Interdisciplinary Environmental Review*, 17(3–4), 232–248.
- Osei, E. K. (2024). Conflict resolution in Northern Ghana: Re(considering) indigenous peace mechanisms. *African Conflict and Peace Building Review*, 14(2), 1–20.
- Ouma, A. (2022). Intergenerational learning processes of traditional medicinal knowledge and socio-spatial transformation dynamics. *Frontiers in Sociology*, 7, 661992.
- Owusu-Nimo, F., Mantey, J., Nyarko, K. B., Appiah-Effah, E., & Aubynn, A. (2018). Spatial distribution patterns of illegal artisanal small scale gold mining (Galamsey) operations in Ghana: A focus on the Western Region. *Heliyon*, 4(2).
- Parliament of Ghana. (2000). *Traditional Medicine Practice Act, 2000 (Act 575)* [Revised edition]. Parliament of Ghana. <https://repository.parliament.gh/items/6cf053b1-28c6-4e4d-a55d-a8dab9349753>
- Peprah, P., Appiah-Brempong, E., Agyemang-Duah, W., Okyere, P., & Gyimah, A. A. (2022). ‘Where were pharmaceuticals in Eden?’ Use of herbal medicine in old age: Focus group discussions among community-dwelling older adults in Ghana. *Journal of Herbal Medicine*, 32, 100549. <https://doi.org/10.1016/j.hermed.2022.100549>
- Sedegah, D. D., Akagbor, M. A., Kwarteng-Donkor, P. B., Adu-Okore, B. I., & Joel Premkumar, P. J. (2023). Exploring The Praxes of Indigenous and Experiential Knowledge of Climate Change On Peasant Farmers in Ghana. *Journal of Sustainability Science and Management*, 18(10), 70–80. <https://doi.org/10.46754/jssm.2023.10.005>
- Senanayake, S. G. J. N. (2006). Indigenous knowledge as a key to sustainable development. *Journal of Agricultural Sciences*, 1(1). <http://repo.lib.sab.ac.lk:8080/xmlui/handle/123456789/812>
- Siakwah, P., Ablo, A. D., Sheburah-Essien, R., Zaami, M., & Yaro, J. A. (2025). Adapting to climate change amidst innovation diffusion and declining indigenous agricultural knowledge and practices in Ghana. *African Journal of Science, Technology, Innovation and Development*, 17(2), 217–228. <https://doi.org/10.1080/20421338.2025.2459355>
- Slavova, M., & Metiu, A. (2022). Relational work and the knowledge transfer process: Rituals in rural Ghana. *Organization Science*, 33(1), 332–352.
- Sokk, V. (2024). Tradition in transition investigating the impact of modernization on indigenous cultures. *Journal Social Humanity Perspective*, 2(1), 15–23.
- Sow, P., Adaawen, S. A., & Scheffran, J. (2014). Migration, social demands and environmental change amongst the Frafra of Northern Ghana and the Biali in Northern Benin. *Sustainability*, 6(1), 375–398.
- Swathi, M., & Dhayalakrishnan, R. (2025). G20, Africa, and Indigenous Knowledge: A Triadic

- Approach to Sustainable Development. Shanlax International Journal of Arts, Science and Humanities, 13(1), 34–41. <https://doi.org/10.34293/sijash.v13i1.9017>
- Tetteh-Quaynor, J. T., Fiase, D. L. A., & Sowah, E. T. (2024). The blood culture of the Ga-Dangbe tribe of the Greater Accra Region of Ghana. International Journal of Innovative Science and Research Technology, 9(9), 3212–3219. <https://doi.org/10.38124/ijisrt/IJISRT24SEP094>
- Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. Decolonization: Indigeneity, education & society, 1(1), 1-40.
- UNESCO. (2003). Convention for the Safeguarding of the Intangible Cultural Heritage. United Nations Educational, Scientific and Cultural Organization
- United Nations. (2007). United Nations Declaration on the Rights of Indigenous Peoples (A/RES/61/295). United Nations General Assembly

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