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Research Article

History of Shea Butter and the Role of Miller and Marian in Cultural Preservation

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Abstract

Shea butter has played a vital role in the cultural, economic and everyday lives of people in Ghana and the West African area. But its contemporary significance for the world sometimes overshadows the deep historical institutions of knowledge that have underpinned its creation for decades. This research looks at the history of shea butter to its current position in the beauty industry. One of the major approach is the indigenous knowledge systems. Methods maintained and transmitted by northern Ghanaian women, have shown resilience in adjusting to changes in economic and social circumstances while sustaining core cultural practices. The study also investigates the role of current local corporations, such as Miller and Marian, in showing how ancient knowledge is retained and actively reinterpreted in modern production and branding. The research therefore views shea butter as a living cultural resource that links the past, present and future.

Keywords: Miller and Marian, shea, butter, West Africa, Ghana

Introduction

Indigenous knowledge is characterized by distinct beliefs and practices transmitted orally throughout generations. Indigenous knowledge is now used in several regions globally, especially in rural areas for daily activities. This knowledge encompasses technology upon which people have relied for environmental adaptation and survival. They exist within a conceptual framework of knowledge that dictates their daily experiences, including challenges to their livelihoods that are overcome through reliance on this knowledge. However, there has been limited research into this knowledge system aimed at both preserving and disseminating it to potential beneficiaries (Lutomia, Bello-Bravo, 2017).

The shea tree is a native wild species restricted to Africa, increasingly cultivated in agricultural settings and also present in savanna parklands. It typically attains an average height of around 15m, with many branches and a thick, waxy, deeply fissured bark that confers fire resistance (Fobil, 2007; SNV, 2011). The shea tree proliferates naturally in the arid Savannah region of West Africa, extending from Senegal in the west to Sudan in the east and into the foothills of the Ethiopian highlands. It proliferates in 19 nations around the African continent, including Benin, Ghana, Chad, Burkina

Faso, Cameroon, Central African Republic, Ethiopia, Guinea-Bissau, Côte d'Ivoire, Mali, Niger, Nigeria, Senegal, Sierra Leone, Sudan, Togo, Uganda, Zaire, and Guinea (Bond'e et al., 2019).

In Ghana, it is prevalent in the Guinea savanna and less so in the Sudan savanna (3). There are two species of shea: *Vitellaria paradoxa* and *Vitellaria nilotica*. *Vitellaria paradoxa* is located in West Africa, whereas *Vitellaria nilotica* is native to East Africa, namely Northern Uganda and Southern Sudan (FAO, 1988; Adekambi et al., 2018; Nasare et al., 2019). Shea butter comprises a blend of fatty acids, primarily oleic, stearic, palmitic, linoleic, and arachidic acids, with oleic and stearic acids predominant and together accounting for around 85% of its fatty acid composition (Julius et al., 2013). The concentration of these fatty acids in Shea butter fluctuates based on the origin of the Shea nuts.

The shea tree grows all over Northern Ghana, covering about 77,670 km². It supports the livelihoods of almost 900,000 rural women who work in this field (Graphic Showbiz, 2021). Adams et al. (2016) indicate that the shea sector employs over 85% of rural women, contributing around 70% of the revenue for rural families in Wa Municipality and its surroundings. The manufacturing of shea butter in Ghana comprises indigenous, semi-mechanized, and automated methods.

The shea business provides employment and income for around one million rural women in northern Ghana engaged in nut harvesting and the sale of processed shea kernels and shea butter.

Primary shea activities include the collection of fruits and nuts, the processing of nuts into butter, and the commercialization of shea products. Entrepreneurs in shea butter, mostly women, engage in sales to both local and international markets. The processing of shea commodities has garnered various forms of assistance from export corporations, NGOs, development partners, and the government. Shea commodities (shea kernels and butter) have become marketable and are shipped to worldwide markets. The American Shea Butter Institute states that shea butter has about twenty-one (21) applications.

Primary applications include local use of shea butter as food and utilization in cosmetics, detergents, pharmaceuticals, and for spiritual reasons. The primary industrial and commercial applications are in cosmetics and medicines (Abdul-Mumeen et al., 2019). Shea butter serves as a significant economic resource for women, since its processing mostly involves rural women, particularly in northern Ghana (Sualihu, 2019). Many people claim that those involved in artisanal butter production have minimal profit margins. Many people claim that the profit margins for those involved in artisanal butter production are quite minimal.

Despite the many advantages of shea butter, many have scrutinized the profitability accrued by rural women engaged in the shea butter-producing industry (Mohammed et al., 2023; Laube, 2016). Several elements influence profitability, some of which are beyond the women's control, while others stem from inefficiencies. Numerous research projects have exclusively focused on the role of shea in food security (Tsiboe et al., 2016), enhancement of livelihoods (Adams et al., 2016), energy use (SNV, 2011), shea marketing (Bond'e et al., 2019), women's involvement in shea value chains (Kent et al., 2014), and shea's impact on food security (Akraasi et al., 2021).

Some have contended that the inputs necessary for conventional hand-crafted butter and the waste produced by shea butter processing render the whole venture unprofitable (Lovett, 2013). This study not only establishes essential baseline information on numerous overlooked production factors but also shows the historical and cultural importance of shea butter in Ghana, documenting its transformation from a traditional practice to a global commodity. It indicates the persistence and adaptability of indigenous knowledge systems that support productivity and cultural identity.

The research indicates how modern companies, via the analysis of Miller and Marian, may serve as stewards of history while fostering economic empowerment for the shea women in northern Ghana. Integrating sustainable practices and ethical sourcing, it creates a market that respects both the environment and the cultural heritage of the communities involved. This approach not only

benefits local economies but also encourages the preservation of traditional methods and knowledge for future generations.

Methodology

The study uses a narrative historical technique to explore the development of shea butter production and the accompanying indigenous knowledge systems in Ghana. The study understands shea butter not as a linear historical record, but as part of a larger cultural and economic continuum that is shaped by social behaviors, gendered knowledge and changing market dynamics. The study is based on a wide range of secondary and archival sources including historical documents on shea butter usage and commerce in West Africa. They are complemented by contemporary scholarly work on indigenous knowledge systems, cultural heritage and the political economics of natural resources. Together, these sources provide a detailed understanding of the development of shea butter production across time.

A narrative and interpretive approach is utilized to outline crucial traditional processing processes, ecological awareness and the pivotal role of women in the conveyance of knowledge. This permits the study to attest to continuity and change, demonstrating the persistence of indigenous knowledge systems not as static traditions but as active processes.

Miller and Marian is used in the research as a contemporary example to connect historical processes with present day realities. The organization is investigated in a continuous historical framework using publicly available data, showing how small firms may be spaces for the preservation, reinterpretation and global diffusion of tradition. The study is limited to recorded sources which may not effectively reflect orally transmitted knowledge and may be subject to archive bias. However the research seeks to overcome these constraints by careful synthesis and critical analysis.

Results

Historical Knowledge Systems and Production of Shea Butter in Ghana

In Ghana, indigenous knowledge (IK) is described as the locally crafted, culturally embedded information, habits and talents that communities have learned and developed over ages, passed down through oral tradition or demonstration. This comprises competence in agriculture, food processing, natural resource management, health practices and artisanal production. This indicates a deep understanding of the local environment, social systems and cultural norms, specific to the unique ecological, economic and social settings of the Ghanaian communities (Akinyemi, 2018; Agrawal, 1995). Indigenous knowledge (IK), is shaped by people's experiences of living in their environment over generations.

These systems are very flexible and durable and are nowhere near becoming obsolete. Communities adapt and upgrade traditional techniques when environmental conditions, market demands, or

technological developments change. Traditional agricultural techniques have been adapted to climate unpredictability, and artisanal processing processes, such as the extraction of shea butter, now use modern technology while retaining the cultural and ecological knowledge embedded in the practice (Matanmi et al., 2012; Ntiamoa-Baidu, 2017). Indigenous knowledge is a living system, balancing continuity and change, protecting cultural identity and preserving practical relevance.

In Ghana, indigenous knowledge sustains sustainable livelihoods and community well-being. Social cohesion, learning across generations and finding solutions effectively makes for integrating into the local culture. Communities may find answers to problems by knowing their particular ecosystems, by applying traditional techniques and by maintaining gender-specific knowledge networks (Gyasi et al., 2013; Warren et al., 2017).

Traditional Processing Techniques

In Ghana, traditional processing procedures, including artisanal methods for preparing food, herbal treatments and other locally acquired things are common to indigenous knowledge. These methods have been refined over decades to enhance efficiency, quality and sustainability. In the production of shea butter, women choose, roast, and process shea nuts according to certain sequences and timings to optimize output and to preserve nutritional integrity (Ntiamoa-Baidu, 2017). Such methods may seem informal yet they are systematic knowledge built through trial and experience.

The shea communities modify strategies depending on the seasonal availability of resources, environmental variables and client desires. Unlike standard industrial processes, the approaches are flexible, ensuring consistent outcomes under any situations. Such adaptability suggests that previous processing mechanisms are not stagnant or obsolete, but continue to evolve with the social and economic developments.

Cultural identity and economic viability are also improved via conventional processing. Artisanal products are not just products. They have cultural value, heritage value and support local economies. Acquiring these talents results in societal recognition, and knowledge passed from generation to generation. Communities show the resilience of indigenous knowledge systems by preserving and innovating upon these traditions, which blend cultural continuity with practical problem resolution (Akinyemi, 2018).

Environmental Knowledge

Environmental knowledge is an important part of indigenous wisdom, reflecting societies' deep understanding of ecosystems, climate and natural resource management. Farmers in Ghana rely on visual cues from plants, animals and weather conditions to determine when to sow and harvest their crops (Gyasi et al., 2013). This knowledge is context-specific and anchored on the interplay between the local natural conditions and human experience, which enables

communities to organize agricultural and resource activities effectively.

This knowledge of the environment is very adaptable and efficient, since communities are always adapting practices to new conditions. Traditional practices such as crop rotation, inter-cropping and water management help maintain soil fertility, protect biodiversity and decrease environmental risks. These actions are examples of practical scientific reasoning embedded in the local culture, indicating its relevance and adaptability (Warren et al., 1995).

Furthermore, myths, rituals and communal acts make the transmission of environmental knowledge culturally effective. Incorporating ecological awareness into social structures allows cultures to sustain and build upon knowledge across time. This combination of ecological knowledge and social cohesion demonstrates that the indigenous knowledge systems in Ghana are dynamic, adaptable and durable and contributes to sustainable development efforts (Matanmi et al., 2012).

Gendered Transmission

The gendered transmission is a major aspect of traditional knowledge in Ghana since women are the main custodians of the cultural traditions. Women are directly involved in food processing, herbal medicine preparation and family resource management, therefore passing on the knowledge to the next generation (Aregahegan, Hager, 2016). These mechanisms sustain cultural norms and social cohesion among communities.

The nature of women-led knowledge systems is flexible; women are always experimenting and evolving in their disciplines. Women adjust roasting and extraction procedures in the processing of shea nuts to improve the quality of the products while satisfying environmental, social and economic criteria. The diffusion of information in women's networks allows for the broad diffusion of these innovations, which in turn strengthens the sustainability and practical value of these activities. Women's roles in the maintenance and modification of these traditions ensure the preservation of culturally significant knowledge and the promotion of economic sustainability (Ntiamoa-Baidu et al., 2017).

Shea Butter as Cultural Heritage

In Ghana, shea butter production is a cultural heritage (CH) more than a commodity. Intangible cultural heritage includes behaviors, knowledge, skills and traditions recognized by cultures as part of their cultural identity, and handed down from generation to generation and based on social life (UNESCO, 2003; Ntiamoa-Baidu, 2017). Shea butter production in Ghana is an economic activity and a cultural practice that links women, families and communities via shared skills, routines and knowledge. It is a process of thousands of years of experimentation, observation and social organization that shows community-specific responses to ecological and social situations.

The framing of shea butter as CH points out its symbolic and cultural value, connecting production processes with Ghanaian identity and heritage. Besides physical

features, the artisanal skills, equipment and seasonal methods are the carriers of historical and cultural stories. This includes harvesting techniques, traditional songs and stories linked with processing, and social standards that control labor and transmission of information among women. The recognition of shea butter as CH shows the importance of such practices in maintaining cultural continuity and fostering a sense of community among different generations. Over time, communities have developed ways to respond to environmental and social changes, while conserving key cultural and technical knowledge. The changes indicate that the practice is not static and old-fashioned but rather dynamic, active, and constantly contested, integrating tradition with contemporary lives, markets, and identity building (Akinyemi, 2018; Matanmi et al., 2012).

An Association of Identity, Tradition, and Community Continuity

The production of shea butter is deeply connected to Ghanaian identity and cultural expression, particularly for women who mostly control the skill. The skills, customs and social relations around shea butter production are embedded in the collective memory and social fabric of the community (Aregahegan, Hager, 2016). Knowledge is passed on by repeating it and sharing it with others, creating the bonds of community and sustaining a shared cultural context.

Shea butter is also a cultural signifier of regional and ethnic identity outside the immediate family unit. There are also different technologies, tools and practices of shea processing in different locations and they are products of historical, ecological and social adaptations. These indicate diversity within the Ghanaian culture and a connection to the indigenous knowledge systems of communities. The connection between material production and intangible heritage places Shea butter as a symbol of tradition and a kind of intergenerational continuity (Ntiama-Baidu, 2017).

Cooperative organizations way of sharing of the works and teachings of future generations are ways to increase the social cohesion and resilience of communities via the participation of women. This social dimension ensures that knowledge is preserved, adapted and successfully passed on. The production of shea butter is an economic activity but also an important cultural system that shows how indigenous knowledge may maintain social and cultural continuity in the face of modern struggles (Matanmi et al., 2012; Gyasi et al., 2013).

Risks of Knowledge Erosion

The loss of expertise threatens the production of shea butter, notwithstanding its cultural relevance. Younger generations move to urban regions for education or work, and hence are less involved in traditional processing processes (Akinyemi, 2018). As fewer people are involved in the profession, practical skills, routines and implicit knowledge may be lost and compromise cultural continuity. The decrease of knowledge is connected with lack of formal documentation. Most of

the knowledge of shea butter production is passed down orally and by experience, from mother to daughter or by demonstration and story. Disruption of these transmission routes risks loss of important parts of the trade as certain practices and ecological knowledge. This decline poses a threat to cultural legacy, and also may pose a threat to product quality and the sustainability of local industrial system.

Systematic record keeping, mentorship programs and community education efforts are needed to address knowledge loss. The recognition of shea butter as intangible cultural heritage might help to preserve knowledge via institutional and informal channels such as local museums, cultural centres and educational institutions. Such techniques ensure that traditional practices are accessible, adaptable and resilient to changes in social and economic conditions (Matanmi et al., 2012; UNESCO, 2003).

Risks of Cultural Dilution through Commercialization

The commercialization-induced of cultural traditions is a major problem. The penetration of shea butter into the national and the worldwide markets may lead to pressure to meet demand, potentially resulting in the industrialization or standardization of traditional procedures, thereby undermining cultural norms, social engagement and artisanal skills (Ntiama-Baidu, 2017). Commercialisation may enhance lives but may impair the cultural and intangible heritage worth of production.

The commercialization process may shift the focus from sharing of community knowledge to individual profit, thereby damaging the social cohesion required for inter-generational learning. Traditional processing cycles, songs and routines may be shortened or eliminated to improve efficiency, while newer generations may see manufacturing as an economic activity rather than a cultural one. This dynamic may provide a long-term danger to the continuity of heritage, threatening identity formation and the transmission of implicit skills.

But this susceptibility does not mean that the legacy of shea butter is inherently fragile. Communities have showed adaption strategies, adopting modern technology and marketing methods, while still keeping traditional features, such as cooperative structures, ceremonial traditions and localized processing procedures. Consciously linking commercialization and historical preservation, shea butter production may retain resilience, flexibility and cultural importance, balancing economic opportunities with safeguarding intangible cultural heritage (Matanmi et al., 2012; Akinyemi, 2018).

Miller and Marian Shea Butter Heritage in Contemporary Ghana

Miller and Marian is a Ghanaian Cosmetics manufacturer of shea butter founded by Dr. Marian Esther Miller in Accra, Ghana. The company combines traditional Ghanaian shea butter skills with modern cosmetic innovation to create hair and body care products that respect local processing traditions (Miller and Marian, 2021).

The corporation aims to protect indigenous knowledge systems. Miller and Marian sources shea butter from women-led cooperatives in Wa, in the northern Ghana. This enables the brand ensure the preservation of the use of traditional harvest and processing techniques, paying fair wages and making lives better for the shea women (Miller and Marian, 2025).

Miller and Marian have woven the tradition into their branding and marketing strategy, characterizing shea butter as a valuable cultural resource rather than a commodity. Through ethical sourcing, community participation and educational activities, the company shows how a modern corporation can be a custodian of history, linking ancestral customs with global markets (GEPA, 2022).

Evolution of Ghana's Shea Value Industry

The shea crop is an important commodity in the savannah parklands of sub-Saharan Africa. In eight countries in the West African sub-region namely; Mali, Burkina Faso, Nigeria, Senegal, Ivory Coast, Gambia, Benin and Ghana, dominating the commercial production and supply of shea to the international market. It is projected that 8 million women are involved in the shea value chain in the sub-region (LMC, 2017). Ghana has emerged as the sub-regional centre for the export of shea kernels and shea butter, valued at around US\$ 152 million (UN, 2019; Coriolis Research, 2018).

The shea global value chain (shea-GVC) covers all actors (individuals and organizations) and the sequence of operations they execute in different geographical locations to transform raw shea nuts into value-added goods for worldwide consumption. Alhassan lists the key actors in the Ghanaian shea value chain as: shea nut collectors, local purchasing agents, traditional butter processors, traders and aggregators; large scale processors, international buyers and processors; domestic micro and small scale entrepreneurs producing shea butter-based cosmetics for local markets; and large scale exporters of shea kernels (Lovett, 2004; Al-hassan, 2015).

The shea value chain in Ghana is characterized by a complex interaction of diverse stakeholders involved in the procurement of raw shea fruits from parklands, processing in rural areas, acquisition of kernels for sale to industrial processors in peri-urban and urban areas and the export of shea derivatives internationally. In the supply chain, almost 2 million women are involved in the manufacturing of shea kernels to initiate the value-adding and commercial processes (LMC, 2017). In Northern Ghana, women from rural families, are responsible for collecting ripe shea fruits from the fields and converting them into shea kernels. Most women processors utilize traditional procedures to process shea kernels into unrefined ('crude') shea butter for home consumption or sale in local markets. Recently, some women have formed cooperatives and trained in the production of shea butter using semi-mechanized processes in order to meet the commercial amounts

demanded by customers linked to the export market (Al-hassan, 2015).

In rural regions, the principal buyers of shea kernels are the intermediaries, the commissioned agents, the local agents and the roaming village agents who buy them for the big operators like processing companies and exporters. Aggregators act as middlemen between shea kernel producers in rural Ghana and the industrial shea processing enterprises and exporters in the metropolitan areas. The industrial processing of shea kernels into derivatives has made progress, although its extent in Ghana is restricted (USAID, 2010; LMC, 2017). The industrial processing and export of shea products from Ghana is mostly dominated by small and medium sized processing firms. There are around 12 industrial processing businesses and exporters operating as international enterprises in the sub-region (Lovett, 2010; Wardell, 2013; LMC, 2017).

Ghana has a tree crop development plan to increase production and productivity, to promote investment in processing facilities and boost commercialization in the value chain development. Key stakeholders in the shea industry such as non-governmental organizations (NGOs), professional bodies like the Global Shea Alliance (GSA), and government agencies have endorsed the tree crop policy as well as the Ghana Cocoa Board, the Ghana Standards Authority, and the Ministry of Trade and Industry (Bella-Bravo et al., 2015; Lovett, Pittendrigh, 2015; Yousuf et al., 2014).

Cultural Preservation in Practice: Miller and Marian

Miller and Marian is a shea butter cosmetics manufacturing brand that represents the heritage of its history, culture and social significance. The business tells the story of shea butter, its origins in the ancient methods of processing by Ghanaian women and its role in communal life. The product descriptions, marketing campaigns, and educational resources are all imbued with storytelling so that purchasers understand shea butter as more than a cosmetic ingredient. The narratives of women-led production, seasonal harvesting, and artisanal extraction techniques are the means through which Miller and Marian sustain the cultural context and social memory of shea butter production.

The company bridges the gap between tradition and modern consumerism, therefore reinforcing the relationship between old knowledge and contemporary practices. The brand not only informs the consumers but also empowers the women of the rural communities who have kept these customs alive for ages. This approach ensures that intergenerational knowledge is recognized and celebrated, encouraging cultural pride and ensuring the continuation of activities that may otherwise be lost or commercialized. The organization consequently supports the sustainability and continuity of Ghanaian indigenous knowledge, making the traditional heritage a live practice reverberating through the local communities and global markets (Matanmi et al., 2012; Ntiama-Baidu, 2017).

The product formulae of Miller and Marian are based on ancient ways of manufacturing shea butter, taking centuries-old procedures while yet conforming with current quality criteria. The company focuses on cold-press extraction, natural purification and minimal processing to preserve the nutritional integrity and sensory qualities that have historically defined shea butter. This commitment is a tribute to the respect for artisanal talent, blending ancient practices and current scientific knowledge to ensure safety, efficacy and sustainability.

This enables Miller and Marian maintain a palpable relationship to the cultural and environmental knowledge of Ghanaian communities. Each product benefits from regional know-how, including timing, temperature control, and blending techniques that have been historically perfected through experience and observation. Miller and Marian show that cultural knowledge may be creative and marketable and yet have its identity (Akinyemi, 2018; Gyasi et al., 2013).

Discussion

Synthesis of Historical and Contemporary Analysis

Continuity versus Transformation

One of the key ideas that has evolved from the study on shea butter and indigenous knowledge, past and present, is the tension between keeping traditions and adapting to change. Traditionally, shea butter production and its associated knowledge systems was community-centred, passed down orally and woven into Ghanaian social and ecological activities (Ntiemoa-Baidu, 2017). These strategies allowed women, families and local communities to maintain cultural identity, traditional skills and sustainable management of natural resources. In current times, commercialization, technological innovation and global market requirements have transformed several parts of production, including scale, tools and distribution routes.

Although there have been changes, certain core parts of indigenous knowledge processing, ecology, women-led systems have survived. This is an example of the adaptive resilience of traditional techniques, the conservation, selective modification or merging of historical techniques with modern inventions to meet changing economic and social situations (Matanmi et al., 2012; Gyasi et al., 2013). The study demonstrates that indigenous knowledge systems balance conservation and innovation, allowing communities and SMEs to keep their cultural integrity while seeking contemporary economic opportunities.

Continuity and transition also operate simultaneously at several levels. While global markets may push for uniformity, local communities have maintained the symbolic, ceremonial and mechanical elements of shea butter production, maintaining cultural and historical knowledge. This duality of processes signals the dynamism of indigenous knowledge, as well as its relevance as a historical bequest and a contemporary economic and cultural resource (Akinyemi, 2018).

Indigenous Knowledge in Modern Economies

In Ghana, indigenous knowledge of traditional shea butter practices, ecological expertise and artisanal skills have been taken up by small- and medium-sized firms and formal markets, proving that indigenous knowledge is compatible with commercialisation and industrial development (Ntiemoa-Baidu, 2017). A notable example of this integration is Miller and Marian Ltd where they use indigenous means to produce premium shea butter cosmetics products and at the same time maintain cultural uniqueness and social significance.

This junction shows that IK is not a historical remnant but a genuine economic resource. SMEs may produce world-leading products that carry the imprint of community heritage, leveraging traditional knowledge in contemporary value chains. Moreover, indigenous knowledge informs sustainability practices, ecological stewardship and ethical sourcing that are increasingly prized in modern economies (Matanmi et al., 2012). Thus, past knowledge systems build current economic resilience, innovation and diversity in present day business practices.

Market driven conservation comes from the integration of indigenous knowledge into commercial activity. This encourages communities to maintain skills, practices, production processes, etc. This approach demonstrates that indigenous knowledge may be both flexible and commercially viable and culturally relevant, linking historical heritage and present-day development strategies (Akinyemi, 2018; Gyasi et al., 2013).

SMEs as Cultural Custodians and Broader Implications

Small and medium-sized enterprises (SMEs) are important custodians of indigenous knowledge and cultural legacy. Growing entities such as Miller and Marian Ltd have used artisanal production, storytelling and responsible sourcing to protect the processes, social relations and ecological knowledge associated with shea butter. Through their operations they assure the recording, celebration and transfer of indigenous practices, thus conserving community identity and historical continuity while accommodating current economic needs (Ntiemoa-Baidu, 2017).

Beyond conserving culture, SMEs impact the way African natural products are seen abroad. Marketing shea butter as a luxury product and a cultural product, SMEs challenge consumers, policymakers and academics to rethink African natural products through a historical lens. It shows the depth, flexibility and complexity of indigenous knowledge systems, and challenges narratives that see traditional methodologies as outdated or inferior. African natural resources may provide unique inputs to sustainability, economic innovation and cultural education when placed in their historical and cultural context (Akinyemi, 2018; Matanmi et al., 2012).

Conclusion

The historical and contemporary analysis of shea butter in Ghana shows how indigenous knowledge systems are dynamic, resilient, and culturally embedded, balancing continuity and flexibility. For decades these

communities have been able to maintain cultural identity, sustain livelihoods and manage natural resources effectively through conventional processing techniques, environmental awareness and gendered knowledge transmission. These systems have survived the forces of commercialization, urban migration and technological innovation and have adapted to modern economic and social conditions while maintaining their core cultural and technical components. Such resilience makes a strong case for the relevance of indigenous knowledge in today's world. It continues to shape environmental practices, economic innovation, and cultural preservation.

Branding of shea butter as intangible cultural asset underscores its symbolic and practical value and links production to identity, tradition and community continuity. The practice involves historical knowledge, social cohesion, and ecological awareness but faces issues such as destruction of knowledge and dilution of culture via commercialization. For the cultural, social and ecological elements of shea butter production, it is important to recognize and safeguard these practices for generations to come. It also shows that African natural resources may be appreciated not just as commodities but also as repositories of historical and cultural memory that link the past to the present.

Miller & Marian Ltd is a modern company that keeps the shea butter heritage alive. It represents the tradition of shea butter via stories, precise formulation and a corporate culture that is based on the respect of the culture. The company safeguards and disseminates the knowledge included in shea butter through narratives that celebrate women-led production, the passing down of historic techniques, and recipes that honor artisanal traditions. Its activities reinforce community bonds, support sustainable livelihoods and ensure inter-generational continuity. Shea butter manufacture is a lively, developing activity and not a simple relic of history. Miller and Marian demonstrates how SMEs can contribute significantly to the preservation of the shea cultural heritage, combining cultural conservation with market-oriented innovation maintaining its historical, social, and ecological integrity. Miller and Marian is proof that the right management of indigenous knowledge can ensure historical continuity, cultural pride and economic resilience, making African natural commodities culturally significant and globally competitive.

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Consent to participate: This study did not involve participants because it is a case study review article.

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References

- Abdul-Mumeen I, Beauty D, Adam A, Shea butter extraction technologies: Current status and future perspective. *African Journal of Biochemistry Research*. 2019; 13(2): 9-22. <https://doi.org/10.5897/AJBR2018.1007>
- Adams AM, Abudulai I, Bashiru M, The shea industry and rural livelihoods among women in the Wa municipality, Ghana. *Journal of Social Science Studies*. 2016; 3(2): 40-56. <https://doi.org/10.5296/jss.v3i2.8706>
- Adekambi SA, Ingenbleek PTM, van Trijp HCM, Integrating Bottom-of-the-Pyramid Producers with High-Income Markets: Designing Institutional Arrangements for West African Shea Nut Butter Producers. *Journal of Public Policy & Marketing*. 2018; 37(2): 327-341. <https://doi.org/10.1177/0743915618813117>
- Agrawal A, Dismantling the divide between indigenous and scientific knowledge. *Development and Change*. 1995; 26(3): 413-439. <https://doi.org/10.1111/j.1467-7660.1995.tb00560.x>
- Akinyemi FO, Indigenous knowledge systems and sustainable development in Africa. *African Journal of Sustainable Development*. 2018; 8(2): 45-58.
- Akrasi RO, Egyir IS, Seini AY, Awo M, Okyere E, Barnor K, Food security in Northern Ghana: Does income from shea based livelihoods matter? *Forests, Trees and Livelihoods*. 2021.
- Al-Hassan S, Ghana's shea industry: Knowing the fundamentals. 2015.
- Aregahegn KA, Hager H, Gendered knowledge systems in African traditional societies. *Journal of Ethnobiology*. 2016; 36(1): 101-115.
- Bello-Bravo J, Lovett PN, Pittendrigh BR, The evolution of shea butter's "paradox of paradoxa" and the potential opportunity for information and communication technology (ICT) to improve quality, market access and women's livelihoods across rural Africa, *Sustainability*. 2015; 7 (5): 5752-5772. <https://doi.org/10.3390/su7055752>
- Bond'e L, Ou'edraogo O, Traor'e S, Thiombiano A, Boussim JI, Impact of environmental conditions on fruit production patterns of shea tree (*Vitellaria paradoxa* CF Gaertn) in West Africa. *African Journal of Ecology*. 2019; 57(3): 353-362. <https://doi.org/10.1111/aje.12621>
- Coriolis Research. Shea market and value chain analysis. 2018.
- Fobil JN, Bole, Ghana: Research and development of the shea tree and its products, New Haven. CT: HORIZON Solutions International. 2007.
- Food and Agriculture Organization (FAO), Appendix 5, Forest genetic resource priorities. 10. Africa. Report of Sixth Session of the FAO Panel of Experts on Forest Gene Resources, held in Rome, Italy. 1988; pp 86-89.
- GEPA, Miller and Marian Limited - GEPA Buyer Portal. <https://www.gepaghana.org/import/ghana-exporter/miller-and-marian-limited/>. 2022.
- Graphic Showbiz. Massive destruction of shea trees in Upper West. 2021.
- Gyasi E, Mensah A, Adu-Ampong E, Local ecological knowledge and adaptation to climate variability in Ghana. *Environmental Development*. 2013; 8: 48-62.
- Julius KI, Lilly N, Ayangealumun I, Effects of Extraction Methods on the Yield and Quality Characteristics of Oils from Shea nut. *Journal of*

- Food Resource Science. 2013; 2(1): 1-12.
<https://doi.org/10.3923/jfrs.2013.1.12>
- Kent R, Bakaweri C, Poole N, Facilitating entry into shea processing: a study of two interventions in northern Ghana. Food Chain. 2014; 4(3): 209-224. <https://doi.org/10.3362/2046-1887.2014.022>
- LMC, International, Socio-economic Impact of Shea Exports, USAID-Global Shea Alliance, 2017.
- Laube W, Global shea nut commodity chains and poverty eradication in Northern Ghana: Myth or reality? UDS International Journal of Development. 2016; 2(1): 128-148.
- Lovett PN, Pittendrigh BR, Shea industry development and stakeholder roles in West Africa. 2015.
- Lovett P, Quality @ Quantity @ Price: A Report Submitted to USAID, (Ed.) USAID, Shea Abuja, Nigeria: Global Shea Alliance. 2013; pp. 1-20.
- Lovett PN, 'The Shea Butter Value Chain. Production, Transformation and Marketing in West-Africa', WATH Technical Report No. 2, United States Agency for International Development (USAID), 2004.
- Lovett PN, Sourcing shea butter in: a sustainability check, in: Global Ingredients and Formulation Guide 2010 the Green Book of Cosmetics, Verlag für chemische Industrie, H. Ziolkowsky GmbH: Augsburg, Germany, 2010; pp. 62-68.
- Lutomia AN, Bello-Bravo J, Communities of practice and indigenous knowledge: a case study of empowering women in processing shea butter using scientific animations. 2017.
<https://doi.org/10.4018/978-1-5225-0838-0.ch012>
- Matanmi B, Adesiji G, Olasheinde E, Oladipo F, Assessment of Usage of Upgraded Indigenous Shea Butter Processing Technology by Women Processors in Kwara State, Nigeria. Agrosearch. 2012; 11(1). <https://doi.org/10.4314/agrosh.v11i1.3>
- Miller and Marian, About Us - Miller and Marian Shea Butter. <https://millerandmarian.com/about/>. 2021.
- Miller and Marian, The Social Impact of Miller & Marian in the Shea Industry of Ghana - Miller and Marian Shea Butter. <https://millerandmarian.com/journal/shea-butter-shea-industry-social-impact-miller-and-marian/>. 2025.
- Mohammed IY, Lilonfe S, Abakr YA, Process Design and Economic Analysis of Traditional Shea Butter Production in Nigeria. Nigerian Journal of Tropical Engineering. 2023; 17(1).
<https://doi.org/10.59081/njte.17.1.009>
- Nasare LI, Kwapong PK, Doke DA, Insect pollinator dependence of shea (*Vitellaria paradoxa* CF Gaertn.) in the Guinea Savanna zone of Ghana. Ecological Processes. 2019; 8(1): 1-9
<https://doi.org/10.1186/s13717-019-0202-8>
- Ntiemoa-Baidu Y, The role of women in African indigenous food and resource systems. Accra: University of Ghana Press. 2017.
- SNV Netherland Development Organization, The shea sub-sector study, Ghana. 2011.
- Sualihu A, The effects of Shea butter processing and marketing on incomes of rural women in the Northern region of Ghana. University for Development Studies. 2019.
- Tsiboe F, Zereyesus YA, Osei E, Non-farm work, food poverty, and nutrient availability in northern Ghana. Journal of Rural Studies. 2016; 47: 97-107.
<https://doi.org/10.1016/j.jrurstud.2016.07.027>
- UNESCO, Convention for the Safeguarding of the Intangible Cultural Heritage. Paris: UNESCO. 2003.
- United Nations Comtrade Database, International trade statistics database. <https://comtrade.un.org/>. 2019.
- USAID (United States Agency for International Development), Accra, West Africa trade hub technical report, in: Investing in Shea in West Africa: a US Investor's Perspective. 2010.
- Wardell DA, Fold N, Globalisations in a nutshell: historical perspectives on the changing governance of the shea commodity chain in northern Ghana, Int. J. Commons. 2013; 367-405.
<https://doi.org/10.18352/ijc.361>
- Warren DM, Slikkerveer LJ, Brokensha D, The cultural dimension of development: Indigenous knowledge systems. London: Intermediate Technology Publications. 1995.
<https://doi.org/10.3362/9781780444734.000>
- Yousuf M, Adeloye A, Olaoye T, Okukpe M, Adeyemi K, Badmus A, Ogundum N, The Influence of Crude Sheabutter Leaf-Extracts on Digestibility and Nitrogen Economy in Goats Fed a Concentrate Diet. Agrosearch. 2014; 14(1).
<https://doi.org/10.4314/agrosh.v14i1.3>