

Vol. 6 No. 1, June 2026



FUAM Journal of Pure and Applied Science

Available online at
www.fuamjpas.org.ng



An official Publication of
College of Science
Joseph Sarwuan Tarka University,
Makurdi.



Exploring the Role of Communication, Cultural Narratives, and Traditional Institutions in Shaping Renewable Energy Adoption: A Comparative Contextual Analysis of Ghana and the Gambia

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Received: 14/11/2025 Accepted: 06/01/2026 Published online: 07/01/2026

Abstract

This paper investigates the role of effective communication, cultural narratives, and traditional institutions in promoting renewable energy adoption in Ghana and The Gambia. Through a systematic, contextual, and comparative analysis, the research highlights how indigenous values, leadership structures, and stakeholder engagement shape the energy landscape in African settings. Anchored in the Diffusion of Innovations theory, the study demonstrates that culturally embedded practices, strategic communication approaches, and the influence of local leaders are pivotal in fostering collaboration, building partnerships, and ensuring sustainable implementation. By emphasizing the importance of community-driven and context-sensitive strategies, this study contributes to a deeper understanding of renewable energy adoption and offers valuable insights for energy policy and development.

Keywords: Cultural narratives, Effective communication, Ghana, The Gambia, Traditional institutions

Introduction

Renewable energy is central to achieving Net Zero emissions and addressing the global climate crisis. As the world transitions toward sustainable energy systems, Africa stands at a critical crossroads balancing technological advancement with socio-cultural realities. While policy frameworks and technological solutions often dominate the discourse, the role of effective communication, cultural narratives, and traditional institutions in shaping public perception and adoption of renewable energy is frequently underexplored.

These elements are vital in influencing how communities perceive, engage with, and ultimately adopt renewable energy technologies. [1] contend that communication strategies deeply rooted in cultural identity possess transformative potential, extending beyond mere persuasion to foster meaningful change. In a similar vein, [2] underscores the importance of indigenous wisdom and collective voice, asserting that sustainable development must be guided by the insights and leadership of local communities. In the Nigerian context, [3] argues that development must be culturally grounded, stating that “development must speak the language of the people, or it will remain a stranger in their land.” This perspective underscores the importance of culturally resonant communication in shaping development outcomes. Building on this insight, the present study explores the intersection of communication, cultural narratives, and traditional institutions in the adoption of renewable energy, with a specific focus on Ghana and The Gambia. By examining how these elements influence

public perception and community engagement, the study contributes to a deeper understanding of context-sensitive approaches to energy transition in West Africa. It seeks to examine how effective communication influences public perception and stakeholder engagement, explore the role of cultural narratives and indigenous values in shaping community acceptance, and analyse the contribution of traditional institutions, such as local leadership structures in facilitating or hindering renewable energy adoption. By comparing the two countries, the study aims to highlight both shared and divergent approaches to energy transition, and to offer context-sensitive recommendations for policymakers and development practitioners across Africa.

Despite growing investments in renewable energy across the continent, adoption rates remain uneven and often constrained by non-technical barriers. In particular, the influence of cultural narratives, communication practices, and traditional institutions is frequently overlooked in energy policy and implementation. This study addresses this gap by providing a culturally grounded analysis that can inform more inclusive, community-driven, and sustainable energy transition strategies.

Methodology

This study adopts a conceptual and qualitative research design, grounded in a comparative and contextual framework. It employs content analysis as the primary method for examining peer-reviewed journal articles, policy documents, institutional reports, and scholarly literature related to renewable energy adoption in Ghana



and The Gambia. The analysis focuses on identifying recurring themes and patterns concerning communication strategies, cultural narratives, and traditional institutions.

Rather than collecting primary data, the study synthesizes existing literature to construct a nuanced understanding of how these elements influence renewable energy initiatives in both countries. Sources were selected based on relevance, credibility, and their contribution to the discourse on energy transition in West Africa. This approach enables a culturally sensitive and contextually grounded comparison of renewable energy adoption pathways in Ghana and The Gambia.

The methodology is guided by Rogers' Diffusion of Innovations theory, which provides a lens for interpreting how information flows, cultural values, and institutional structures affect the uptake of renewable technologies. The comparative approach facilitates the identification of similarities and differences in how cultural and communicative dynamics shape energy adoption across distinct socio-political contexts.

To ensure validity, the study applies triangulation by analysing multiple types of sources, maintains thematic consistency through systematic coding, and adheres to transparent documentation of the analytical process. Reflexivity is also considered, acknowledging the researcher's positionality and potential influence on interpretation.

The findings aim to inform future empirical research, support policy formulation, and offer strategic insights for implementing community-based energy solutions in other African regions, such as Nigeria, where cultural and institutional dynamics play a critical role in technology adoption.

Literature Review

Linking Effective Communication, Cultural Narratives, and Traditional Institutions in Renewable Energy Adoption

The connection between effective communication, cultural narratives, and traditional institutions has been emphasized by [1] who argue that culturally grounded messaging plays a vital role in shaping public engagement with renewable energy initiatives. When such messages are delivered through indigenous languages and local media platforms, they enhance comprehension and foster deeper acceptance within communities building on this foundation, the present study explores how these three components, effective communication, cultural narratives, and traditional institutions influence renewable energy adoption in Ghana and The Gambia. By comparing the two countries, the study examines how these factors are applied within their respective energy transition efforts. Although Ghana and The Gambia face similar developmental challenges, they differ in the ways these cultural and communicative strategies are integrated into their renewable energy initiatives.

The Role of Effective Communication in Renewable Energy Adoption in Ghana and The Gambia

Effective communication with stakeholders is crucial for the success of community-based renewable energy projects, as it directly influences project acceptance, sustainability, and overall impact [4]. This suggests that communicating effectively with stakeholders is essential for ensuring that

community-driven renewable energy initiatives are embraced and maintained over time.

In a similar context [5] emphasizes that participatory communication plays a pivotal role in facilitating the transition to renewable energy, particularly in rural African communities. His study demonstrates that when local voices are actively involved in the design and delivery of energy-related messaging, public understanding and acceptance of solar technologies significantly improve. This reinforces the importance of strategic, culturally embedded communication in advancing renewable energy efforts in Ghana and The Gambia

Role of Cultural Narratives in Renewable Energy Adoption

Culture serves as the lens through which communities interpret and respond to the world around them. It profoundly influences the willingness of individuals and groups to embrace renewable energy technologies [6] This underscores the importance of cultural norms and values in shaping public attitudes toward energy transition and sustainability.

Cultural narratives are defined as the stories, beliefs, and traditions through which communities express their identities play a pivotal role in influencing behaviours and perceptions. These narratives reflect collective histories, moral values, and aspirations, and when harnessed effectively, they can foster trust, ownership, and long-term commitment to renewable energy initiatives. However, misunderstandings or misinterpretations of these narratives often lead to miscommunication and resistance, especially when external interventions fail to align with local realities.

Despite their significance, the impact of cultural narratives remains underexplored in mainstream energy literature, particularly within African contexts. According to [7] argues, any development effort that ignores the cultural context of the people is bound to fail, no matter how well-intentioned. This study builds on that premise by arguing that cultural narratives and traditional institutions are not peripheral actors but central pillars in shaping public perception, legitimacy, and long-term acceptance of energy transitions.

This study compares Ghana and The Gambia to examine how cultural narratives influence renewable energy adoption. In Ghana, narratives centered on environmental stewardship, ancestral responsibility, The emphasis on environmental stewardship, ancestral responsibility, and economic empowerment has significantly contributed to the widespread social acceptance of renewable energy initiatives in Ghana [8] In contrast, The Gambia's emphasis on addressing energy poverty and promoting inclusive development aligns closely with the goals of expanding renewable energy access, presenting a strategic opportunity for sustainable growth. As noted in the [9], bridging the energy access gap through clean energy investments can improve quality of life and stimulate economic opportunities. Similarly, [10] underscores that energy is essential to reducing poverty and achieving sustainable development in The Gambia.

Drawing from these examples, the study underscores the importance of culturally grounded approaches that recognize the power of storytelling, traditional wisdom, and community



values in shaping energy futures. Development communication, as [11] argues, must speak the language of the people, not only linguistically, but also culturally and emotionally. This perspective is reaffirmed by [3], who emphasizes that inclusiveness is a fundamental principle of democracy, noting that the historical evolution of democratic practice has been a continuous struggle for broader participation and representation. Together, these insights reinforce the need for energy policies and communication strategies that are not only technically sound but also socially and culturally embedded.

The Role of Traditional Institution in Renewable Energy Transition and Adoption

Traditional rulers and institutions continue to wield significant influence across many African communities. Their authority, rooted in cultural heritage and communal trust positions them as vital stakeholders in shaping public opinion and legitimizing development initiatives. Local influencers play a crucial role in shaping community perceptions, particularly regarding renewable energy adoption. According to [12], traditional institutions, as custodians of cultural norms and practices, play a pivotal role in facilitating collaboration among stakeholders and community members, thereby fostering trust and enabling meaningful behavioural change. Building on this perspective, this study emphasizes that such culturally embedded leadership structures are not only essential for advancing participatory and context-sensitive energy transitions, but also for ensuring that renewable energy initiatives are socially accepted and sustained over time their legitimacy within local governance structures enables them to mediate resistance, promote sustainable practices, and facilitate inclusive dialogue. Acting as cultural intermediaries, traditional institutions help align modern energy technologies with local value systems, thereby enhancing community engagement and supporting participatory models of sustainable development [13] This mediating function is particularly vital in rural and peri-urban communities, where scepticism toward externally driven interventions is often pronounced, and cultural narratives play a significant role in shaping how technological innovations are interpreted and received.

Moreover, the involvement of traditional institutions adds academic value by highlighting the intersection of indigenous knowledge systems and contemporary energy solutions. Their participation not only enriches the discourse on energy justice and equity but also underscores the importance of culturally embedded communication strategies in policy design and implementation. Recognizing and leveraging the authority of these institutions can thus lead to more resilient, adaptive, and socially accepted energy frameworks.

However, scholars argue for the re-integration of traditional rulers into contemporary policy networks, emphasizing their potential to enhance stakeholder engagement and policy legitimacy [15] This viewpoint underscores the importance of designing policies that are responsive to the specific cultural values and developmental needs of local communities [16] argues that traditional authorities, as authentic and time-tested institutions of governance, have been politically, administratively, and financially marginalized in modern local government systems. However, their commendable contributions to education, health, and environmental management demonstrate that their full potential remains underutilized. Integrating them as active partners could significantly enhance local development outcomes. Their cultural authority and indigenous knowledge systems

position them as vital actors in bridging formal governance with community realities in Nigeria, effective community leadership is indispensable for promoting sustainable development, particularly in sectors like renewable energy where cultural acceptance is crucial. Despite their potential, traditional institutions often face challenges in communication, especially with government agencies. These gaps can lead to fragmented efforts and inconsistent messaging [17]. Bridging these divides through collaborative frameworks is essential for coherent and impactful renewable energy adoption.

In Ghana, traditional institutions play a vital role in rural renewable energy projects by fostering trust and cooperation. The Renewable Energy for Communities Coalition (RE4CC) exemplifies this, having successfully opposed a coal plant and promoted solar initiatives like Solar for School [18]. In The Gambia, traditional leaders are central to community engagement and local ownership of energy projects, particularly in rural electrification. The Kartong Village energy transition, marked by a shift from a circular to a linear energy system, exemplifies the transformative potential of participatory planning and bottom-up approaches in driving community-led energy innovation [19]. Building on this insight, the present study argues that locally driven models not only foster community ownership but also ensure that energy initiatives are aligned with indigenous priorities, thereby enhancing their legitimacy and long-term sustainability. Through a comparative lens, the study reveals how localized cultural and communicative dynamics critically shape the trajectory and success of renewable energy adoption in Ghana and The Gambia. The distinct yet complementary roles of traditional institutions in both contexts underscore the importance of integrating local governance structures into energy policy and communication frameworks. When effectively engaged, these institutions can serve as catalysts for inclusive energy transitions; when overlooked, they may inadvertently become barriers to progress.

Theoretical Framework

This study is anchored in **Rogers' Diffusion of Innovation (DOI) theory** [20], which outlines five stages in the innovation-decision process: knowledge, persuasion, decision, implementation, and confirmation. Communication channels are central to each stage, shaping how innovations are introduced, understood, and adopted.

DOI theory also categorizes adopters into innovators, early adopters, early majority, late majority, and laggards. This framework helps explain how cultural narratives, traditional institutions, and communication strategies influence public engagement and adoption.

Effective communication rooted in cultural narratives and supported by trusted traditional institutions aligns closely with DOI principles. It fosters early adoption, reduces resistance, and enhances stakeholder ownership. Trust, transparency, and social capital are essential in participatory models, accelerating diffusion and promoting sustainable energy transitions. This theoretical grounding complements the study's qualitative methodology and supports its aim to promote culturally responsive and community-centred energy strategies.

By applying DOI theory to the comparative contexts of Ghana and The Gambia, this study illustrates how culturally



embedded communication and traditional leadership structures influence the pace and pattern of renewable energy adoption, offering insights into context-sensitive diffusion strategies

Discussions

This study affirms the critical influence of communication, cultural narratives, and traditional institutions in shaping public acceptance and the implementation of renewable energy technologies in Ghana and The Gambia. The findings demonstrate that informal dialogue and participatory communication significantly enhance public understanding and acceptance, particularly within rural communities where trust, familiarity, and cultural resonance are paramount. Locally grounded, dialogic approaches proved more effective than top-down messaging, as they translated complex technical information into culturally meaningful narratives, thereby fostering community ownership and sustained engagement.

The role of cultural narratives emerged as a central factor in shaping energy perceptions and attitudes. In Ghana, dominant themes such as environmental stewardship, ancestral responsibility, and communal empowerment aligned with broader ecological values, contributing to the positive reception of renewable energy initiatives [21]. Conversely, in The Gambia, narratives centred on energy poverty, equity, and social justice, reflecting the urgency of access and fairness in energy distribution [8,9]. These divergent narrative frameworks underscore the necessity of tailoring communication strategies to the cultural priorities and lived experiences of each context. This view aligns with [22] argument that storytelling serves as a vital pedagogical tool for transmitting indigenous values, fostering community cohesion, and advancing development efforts rooted in cultural identity. Traditional institutions were found to be instrumental in legitimizing renewable energy projects and facilitating community engagement. In The Gambia, their involvement was particularly vital in rural electrification efforts, where trust in local governance structures enabled community buy-in and reduced resistance. These leaders functioned as cultural gatekeepers, aligning energy initiatives with local norms and values, thereby enhancing sustainability. Similarly, in Ghana, chiefs and elders played a mediating role between external actors and local communities, with their endorsement often translating into increased cooperation and smoother project execution.

These findings align with existing scholarship advocating for the strategic reintegration of traditional rulers into community-based development frameworks to enhance legitimacy and local ownership [23]. Furthermore, the socially integrative capacities of traditional institutions have been recognized as essential for fostering participatory governance and sustainable development. [24] highlights the critical role of traditional rulers in peacebuilding efforts across Northeast Nigeria, emphasizing their contributions to conflict mediation and community cohesion through partnerships with NGOs. Similarly, [25] underscore the importance of traditional leaders in post-conflict recovery and social cohesion, arguing that their active civic participation enhances resilience and community mobilization. In the context of renewable energy adoption, these insights suggest that traditional institutions can serve as vital conduits for community engagement, helping to legitimize energy initiatives and align them with local values. Their involvement not only facilitates trust and cooperation but also ensures that energy transitions are socially

embedded and culturally responsive, particularly in rural and underserved regions. Collectively, these insights carry significant implications for policy and practice. First, community-centred communication should be prioritized to build trust and foster inclusive participation. Second, narrative-driven engagement can enhance the cultural relevance and effectiveness of energy campaigns. Third, strategic collaboration with traditional institutions can legitimize projects and ensure long-term sustainability. Finally, comparative insights from Ghana and The Gambia offer valuable lessons for regional energy policy harmonization, emphasizing the importance of context-sensitive approaches that respect local values, governance structures, and indigenous knowledge systems.

Conclusion

Based on the findings of this study, several strategic directions are recommended to enhance the effectiveness and sustainability of renewable energy adoption in African contexts. First, energy policies should be culturally informed, reflecting the values, traditions, and lived experiences of local communities. This ensures that interventions resonate with the people they are intended to serve and fosters deeper engagement. Engaging traditional institutions, such as chiefs, elders, and other community leaders is essential for legitimizing energy projects and securing long-term community support. Their embedded authority and cultural relevance position them as vital partners in facilitating behavioural change and promoting inclusive development. Communication strategies must be rooted in local languages and culturally resonant narratives. Translating technical concepts into familiar and meaningful stories can significantly improve public understanding, reduce resistance, and encourage active participation. Finally, regional energy policy harmonization should be pursued with sensitivity to local governance structures. Scalable solutions must be adaptable to diverse cultural contexts, ensuring that energy transitions are not only technically sound but also socially embedded and equitable.

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Cite this article

Okoko N. (2026). Exploring the Role of Communication, Cultural Narratives, and Traditional Institutions in Shaping Renewable Energy Adoption: A Comparative Contextual Analysis of Ghana and The Gambia. *FUAM Journal of Pure and Applied Science*, 6(1):96-100

