

INDIGENOUS EPISTEMOLOGIES AND RESEARCH PRACTICES OF IGBO (NIGERIAN) ENVIRONMENTAL COMMUNICATORS

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Abstract

There is a growing acceptance of pluralism in knowledge systems, and a desire to integrate non-Western worldviews into the research process, particularly indigenous epistemologies. However, there are tensions surrounding ownership and control of knowledge, and the ethics of knowledge appropriation. These tensions are exacerbated by the often not-acknowledged internal diversity of indigenous communities, which makes the

reductive generalization of ‘one’ epistemology problematic. As such, the marginalized indigenous epistemologies may lend to vital understanding and insight into harmonious living with natural ecosystems and thus. Yet, the homogenization of multiple languages, beliefs, and worldviews into ‘indigenous epistemologies’ dismisses these pluralities and invites appropriation by the very hegemonies that have dominated, undermined, or disregarded them. This paper interrogates indigenous epistemologies in the context of research practices of environmental communicators in South East Nigeria, and considers strategies to safeguard, nurture, and empower these epistemologies against outside appropriation. It is based on the qualitative analysis of 15 one-on-one semi-structured interviews from environmental communicators in South Eastern Nigeria. Thus, the participants advocate for a critical deconstruction of dominant governance frameworks in favor of reconstructed systems centered on indigenous epistemologies.

Keywords: Indigenous Knowledge System, African Epistemology, Igbo, Climate Change

Introduction

The contemporary global landscape is shaped by escalating environmental challenges, including the threats of climate change, significant biodiversity loss, and widespread pollution (Mbah, Ajaps & Molthan-Hill, 2021). These issues collectively demand urgent and coordinated responses from society’s worldwide (Hrei et al., 2024). Within this critical context, effective communication stands out as an indispensable tool. It is

crucial for cultivating environmental literacy, enhancing public awareness, as well as genuine concern for ecological issues, and actively encouraging participation in sustainable actions aimed at mitigating environmental degradation (Hrei et al., 2024). Indeed, communication is central to shaping public opinions and attitudes in an increasingly information-driven society (Hrei et al., 2024).

Nigeria, as a nation, confronts a number of environmental problems. These challenges are not isolated occurrences but are symptomatic of the interactions among economic, social, and political factors that define the country's ecological landscape. In this specific national context, environmental communication assumes a vital role, acting as a catalyst for achieving environmental preservation and long-term sustainability. Its importance is underscored by its inherent centrality to virtually all human activities and its capacity to bring order and coherence to societal interactions concerning the environment (Okon & Emanuel-Okogbule, 2025).

Environmental journalists and other environmental communicators are encouraged to begin rethinking research and communicative practices to mirror Africa's epistemological heritage. This will help in exploring good practices in local contexts that constitute ethically justifiable epistemic alternatives to the dominant Western paradigm (Ibanga, 2018; Kumpu, 2022). Epistemologies emerged and overtime, have evolved within the local socio-cultural milieu that shapes our world (Udefi, 2014). Post-colonial indigenous

epistemologies are largely informed by efforts to liberate, rediscover and reinstate local epistemic sovereignty undermined and devaluated by epistemic impositions of colonialism, imperialism and globalization by the Western world. Access to knowledge, how knowledge is created and who can create it became instruments of domination. Having claimed to possess the only legitimate epistemology, the West imposed its worldview disrupting and displacing the communicative ecology of the colonized (Ogoko, 2008). As such, Eurocentric epistemic injustice continues today, in asymmetrical coverage of the Environment in Global South and North media, framing the Global South as a bizarre ‘other’ that can only be salvaged by the Global North (Jamil & Bhuj, 2023; Gilbert, White & Tallman, 2022).

The dynamic relationship between the various indigenous knowledge systems and effective environmental communication in Nigeria reveals the essential significance of employing culturally grounded and context-sensitive approaches to an array of diverse research practices and methodologies. This understanding emphasizes, in a crucial way, how local traditions, rich ancestral wisdom, and the collective experiences of communities can inform, illuminate, and enhance the ways in which we address pressing and critical environmental issues (Kumpu, 2022). In this light, the integration of these indigenous perspectives holds tremendous potential to drive positive environmental change and to empower local populations

in their stewardship of the land and resources (Jamil & Bhuj, 2023; Gilbert, White & Tallman, 2022).

Indigenous environmental communicators (IEC) actively engage on a daily basis with the pressing environmental challenges faced by community members. These communicators seek to not only understand but also explain and duly address these environmental issues within local communities by employing a rich variety of means such as storytelling, poetry, drama, proverbs, local folklore, songs, as well as traditional practices related to hunting, farming, and fishing. Such approaches to environmental communication are associated with indigenous epistemologies and research practices that are unique and specific to each local community. However, it is important to highlight that academic literature focusing on environmental communication predominantly draws on Western epistemologies, which results in the marginalization of local epistemological perspectives and practices.

Moreover, Indigenous environmental communicators who utilize Indigenous epistemologies and research practices in their efforts to create environmental awareness among the people in their communities encounter different challenges. These significant challenges include the remnants of colonialism, which manifest in the form of exogenous policy frameworks, persistent illiteracy and language barriers, entrenched poverty, and the overwhelming influence of Western media and non-governmental organizations (Nwoye, 2019). Despite the numerous challenges that they face, IECs are also able to perceive and identify opportunities

for success. Such opportunities arise from their ability to assess and determine communication needs that are based on the lived experiences of local community members, in addition to collaborating with culturally sensitive communicators such as tradition bearers and employing local languages, places, and non-commercial media outlets, such as community libraries and gardens. In light of these considerations, this research investigates the Indigenous epistemologies and research practices of Nigerian environmental communicators as they explore both the challenges and the opportunities present in the field of Indigenous environmental communication. The foundational research is based on qualitative narrative interviews that were conducted with ten dedicated Indigenous environmental communicators from Nigeria, who shared their insights and experiences in this important area of study (Ibanga, 2018).

Indigenous Knowledge in Environmental Management and Resilience in (South East) Nigeria

Indigenous communities in Nigeria and West Africa possess a wealth of knowledge and practices that have promoted environmental conservation and resilience. They employ sustainable farming practices such as crop rotation, poly-culture, and agro forestry, which maintain soil fertility and promote biodiversity (The Environmentalist View, n.d.). Practices like regulated hunting and fishing, exemplified by the Ogoni people who traditionally limit fishing to specific seasons, and sophisticated water resource management techniques, such as rainwater harvesting and rotational grazing by

Fulani herdsmen, ensure the sustainable utilization of natural resources (The Environmentalist View, n.d.).

Forest conservation and biodiversity are also embedded in Indigenous practices. Sacred groves, protected areas where hunting, logging, or farming are prohibited, are maintained as integral parts of spiritual practices, serving as crucial biodiversity hotspots (The Environmentalist View, n.d.). Cultural taboos often restrict the excessive use of specific plants or the killing of animal totems, acting as natural check mechanisms against resource depletion (Egeruoh-Adindu, 2022).

In terms of climate resilience and disaster prediction, Igbo communities have devised measures for growing drought-resistant and early maturing indigenous crop varieties, gathering wild fruits, and cultivating wetlands to survive climatic hazards with minimal external support (Akpodiogaga, 2010, as cited in Egeruoh-Adindu, 2022). They also utilize local methods to predict potential disasters and possess established administrative structures to cope with them, recognizing that a well-conserved environment reduces associated risks (Dube & Munsaka, 2018, as cited in Egeruoh-Adindu, 2022). Traditional knowledge systems, such as observing tree phenology have been used for seasonal climate forecasting, which demonstrates a great understanding of ecological indicators (Mafongoya et al., 2021, as cited in Egeruoh-Adindu, 2022).

Indigenous communities also utilize natural remedies like Neem tree extracts for pest management, avoiding harmful chemical pesticides, which reduces

environmental contamination and promotes healthier ecosystems (The Environmentalist View, n.d.). They possess extensive knowledge of medicinal plants and their conservation, recognizing their dual role in healthcare and ecological balance (The Environmentalist View, n.d.). For many Indigenous groups, nature is revered as a partner rather than merely a resource to be exploited. Rituals, taboos, and folklore inherently instill a respect for the environment, ensuring the survival of species through practices like prohibitions against cutting specific trees or hunting certain animals (The Environmentalist View, n.d.). Even in architecture, Indigenous knowledge is evident: mud houses in parts of Nigeria, for example, incorporate locally sourced materials and eco-friendly designs that provide natural insulation, thereby reducing energy needs (The Environmentalist View, n.d.).

The persistent undermining of Indigenous Knowledge Systems is not an accidental oversight but a direct legacy of colonialism. Historical accounts reveal a "deliberate effort to eradicate African education" and undermine African social structures through the introduction of Western institutions and the replacement of local languages with foreign ones (Eze & Mba, 2013). This "assault on traditional knowledge" during the colonial era has left enduring structural manifestations. The current dominance of Western perspectives (Sustainability Directory, n.d.), the systematic exclusion of local voices (Uzah& John, 2025), the pervasive use of English language in communication (Oramah et al., 2025), and the notable lack of culturally relevant communication materials (Uzah& John, 2025) are direct,

lingering consequences of this historical project. Therefore, the challenge of integrating IKS into environmental communication is far more profound than a mere contemporary oversight or a simple matter of differing communication styles. It is a systemic issue linked to the colonial legacy that devalued, marginalized, and sought to eradicate Indigenous ways of knowing. Addressing this requires confronting and dismantling inherited power structures and biases, rather than merely attempting to bridge superficial communication gaps.

Knowledge gap and justification

At the core of the persistent environmental challenges in Nigeria lies a systemic disconnect: the prevailing Western-centric environmental communication strategies often implemented across the nation are misaligned with the rich Indigenous Epistemologies (IE) that have historically guided Nigerian communities' symbiotic relationship with their environment (Oramah et al., 2025). This misalignment is not merely a technical oversight because it also represents a fundamental clash in worldviews and ways of knowing. Western scientific approaches typically prioritize objective data, efficiency, expert-driven methodologies, and a reductionist view of systems, seeking universal truths (Funtowicz & Ravetz, 2025). In stark contrast, Indigenous Epistemologies are characterized by holism, community-driven consensus, relationality, and an intimate connection to specific cultural and geographical contexts (Mbah, Ajaps & Molthan-Hill, 2021). Knowledge in Indigenous systems is often transmitted through oral traditions, experiential learning, and a strong spiritual dimension. This inherent

divergence in knowledge paradigms creates significant tension that may lead to misunderstandings and conflicts when external, Western-derived solutions are imposed upon Indigenous contexts without proper consideration for local realities (Nwosimiri, 2022).

This epistemological clash has consequences because it impedes the effectiveness of environmental communication. When messages and strategies are crafted from a Western scientific framework and directed at Indigenous communities whose understanding of the world and validation of knowledge differ, a misalignment occurs. For instance, a focus on "objective data" may not 'go down well' with communities who value knowledge passed down through "oral tradition" and "spiritual connection" (Sustainability Directory, n.d.). This fundamental incompatibility means that messages are not clearly understood, trusted, or acted upon, and these risk causing "misunderstanding and poor climate change action" (Oramah et al., 2025). The issue is therefore, not a superficial communication flaw but a disconnect in how knowledge itself is perceived and validated by communicators versus the intended audience.

Research that specifically focuses on indigenous, African research epistemologies remains sparse. This suggests that this area of research is a relatively open field for consideration and expansion. Nevertheless, in the broader literature on research epistemologies, a number of "knowledge gaps" can be identified where consideration of indigenous, African epistemologies, taken broadly as "ways of knowing", "ways of being"

and “ways of doing” needs further elaboration. This includes the theoretical foundations of indigenous epistemologies in African cosmologies and ontologies, the nature of the communitarianism of indigenous epistemologies and how this reflects the nature of African societies, the foundational role of narrative and storytelling in indigenous epistemologies, how indigenous epistemologies complement and coexist with Euro-Western epistemologies, how indigenous epistemologies relate to ethical frameworks and codes of practice for research, and how indigenous epistemologies inform pedagogies and/or learning systems. Informed by the above scenarios, this paper seeks to

- Explore and document Indigenous epistemologies and research practices of Igbo environmental communicators.
- Assess how indigenous knowledge among Igbo environmental communication experts can be integrated to address the Western dominance in this context.

Understanding the Indigenous Epistemologies

The term indigenous epistemologies refer to the worldview, knowledge systems, and philosophies of indigenous communities. Depending on the context, different terms may be used to express similar ideas (Chimakonam & Ogbonnaya, 2021; Omogunwa & Onyibor, 2019; Ihejirika, 2021; Edema, 2018). For example, environmental communicators of Nigerian descent refer to indigenous epistemologies as African

epistemologies, Nigerian epistemologies, or Igbo epistemologies. Epistemologies refer to systems of knowledge, ways of knowing, or philosophies of knowledge. Understanding indigenous epistemologies necessitates understanding the broader context of indigenous peoples and communities. Thus, indigenous peoples are referred to here as the original inhabitants of a region who have persisted with pre-colonization customs, languages, and modes of societal organization (Gone, 2017).

Indigenous peoples are also referred to as ethnic nationalities, minority or disadvantaged groups, or first nations in some contexts. For instance, the Igbo people are considered indigenous to Nigeria because they are the original inhabitants of the region now known as the South East Nigeria and have persisted with their pre-colonization customs, languages, and societal organizations (Ogoko, 2008). Indigenous epistemologies are viewed as unique philosophical systems that differ from Western/modern philosophical systems. Nonetheless, whether rooted in Western/modern or non-Western/traditional civilizations, philosophical systems generally address the same cardinal issues concerning the nature of reality, existence, the world/universe, knowledge, morality, and community/society (Owo & Otu, 2022).

Indigenous epistemologies address these cardinal issues very well, rendering them distinctive knowledge systems. Since indigenous epistemologies consider knowledge as communal, indigenous epistemologies emphasize community participation in the co-creation of

knowledge. As a result, some indigenous epistemologies emphasize the ethics of knowledge, critiquing the commoditization of knowledge and advocating that knowledge systems shouldn't be privately owned or capitalized (Ibanga, 2018). Also, since indigenous epistemologies consider knowledge as a holistic system, knowledge co-creation processes must involve the senses, feelings, and spirituality (Chimakonam & Ogbonnaya, 2021). Hence, there is a tendency in indigenous epistemologies to intertwine the sacred and the profane.

In the particular context of Nigerian environmental communicators, a better understanding of indigenous epistemologies necessitates recognition of the ways in which the diverse local knowledge systems shape, transform, and influence both the perceptions and responses to the pressing and urgent environmental issues that are faced by many communities across the nation. This recognition is essential for establishing effective communication as well as for boosting meaningful engagement with these critical issues on various social, cultural, and political levels throughout the society at large. Recognizing the importance of these diverse approaches helps in bridging gaps in understanding and promotes collaborative efforts that can lead to sustainable solutions suitable for the unique contexts of these local communities.

It is important to understand that Indigenous Knowledge Systems (IKS) are not static or merely anecdotal; they are dynamic, empirically validated systems that have evolved through generations of trial, observation, and

adaptation (Eze &Mba, 2013; Egeruoh-Adindu, 2022). The phrases "developed over generations," "evolved through trial and error," and "developed by experimentations" (Eze &Mba, 2013; Egeruoh-Adindu, 2022) indicate a continuous, iterative process of observation, adaptation, and refinement over vast periods. This demonstrates that IKS are living, evolving systems, rigorously tested and refined within specific ecological and cultural contexts. The efficacy of these systems is evident in their ability to sustain communities and their environments for centuries, even if their "experiments" were not documented in a Western scientific format. This crucial understanding reframes IKS from cultural curiosities to vital, practical, and proven resources for achieving environmental sustainability.

Scholarly discourse on Nigerian environmental communicators' research practices and knowledge systems narrowed down on the goal of exploring Nigerian environmental communicators' indigenous epistemologies and research practices. The focus was on interrogating the communicators' indigenous environmental awareness, knowledge, mental models, research practices, and decision-making processes. There is a significant body of scholarly discourse on African environmental ethics, epistemologies, and ontologies (Ibanga, 2018). However, there is a dearth of empirical studies on indigenous epistemologies, environmental awareness, knowledge systems, and research practices of South East Nigerian environmental communicators, in spite of the important roles they play in ecological sustainability. Consequently, there is a gap in scholarly

understanding of Nigerian environmental communicators' indigenous environmental awareness, knowledge systems, and research practices. Therefore, underpinned by the African environmental ethics (Ogar & Bassey, 2019), there is a need for African scholars to explore the environmental communicators' indigenous epistemologies, awareness, knowledge systems, and research practices on the environment.

Methodology

This paper discusses the epistemologies and research practices of these communicators/activists, arguing that environmental communicators in South East Nigeria resist and reshape Western imaging of their environment by creating alternative discourses on the environment. The study employed a qualitative approach using interview as an instrument of data collection. Based on in-depth interviews with 15 purposively-selected Igbo environmental communicators involved in activism, advocacy, and journalism, part of the findings are presented here (because data collected for the study is broad and we intend to explore more publications with the available data), focusing on how religious beliefs, cultural practices, and local languages shape their understanding of the environment, and how these affect their research practices.

This study contributes to the growing body of research on indigenous approaches to environmental issues by focusing on the diversity of approaches in a single country rather than a specific community from multiple countries. It explores how diversity in local languages

shapes understanding and discourse on the environment, expanding the discourse beyond attention to local languages but also considering translation. Academic research is often in English, and discursive power is still embedded in and dominated by English, although there are efforts to include local languages in research design. Findings from the study are presented fewer than five themes, which reflect the worldviews/epistemologies of the communicators in understanding the environment: it is a gift from God, the foundation of culture, it is life, it is sacred or holy, and it is collective. These themes also explore how these worldviews/epistemologies shape research practices: storytelling, participant observation, documentary analysis, quantitative methods, and use of local languages.

Key findings

The research sought to explore and document Indigenous epistemologies and research practices as espoused by Igbo environmental communicators in their environmental communication efforts in the region. These practices are articulated through unique Indigenous research methods and techniques. The findings reveal that South East Nigerian environmental communicators have employed quality research methodologies rooted in their Indigenous epistemologies, cosmologies, and philosophies in their efforts to interrogate and campaign against environmental degradation in Nigeria. In presenting these methodology types, there is a compelling need for academic discourses on Indigenous methodologies and epistemologies in environmental research,

communication, and activism to challenge the dominance of Euro-Western research methodologies, paradigms, and systems that perceive and reduce Indigenous knowledge systems to mere mythology, superstition, and primitivism (Ibanga, 2018; Nwoye, 2019). Four categories of Indigenous research methodologies, epistemologies, and practices were identified: Ethno-Environmental Research Methodologies and Epistemologies, Indigenous Language Research Methodologies and Epistemologies, Indigenous Art Research Methodologies and Epistemologies, and Community-Centred Research Methodologies and Epistemologies. Under each category Indigenous methodologies and practices, as well as their modes portray thought systems that are globally relevant, are theoretically driven, and can contribute to discourses and paradigms in academic research, communication, and activism were illustrated. These findings add to the growing corpus of literature on Indigenous research methodologies and epistemologies.

Findings further reveal that Indigenous epistemologies play a crucial role in shaping the communication strategies that are utilized by South East Nigerian environmental communicators. These strategies place a strong emphasis on the undeniable importance of local knowledge, cultural practices, and community engagement. All of these elements are essential for addressing the pressing environmental issues that communities face today. The integration of Indigenous perspectives into these communication strategies ensures that the messages conveyed are not only relevant but

also culturally resonant. This leads to a meaningful connection with the community and promotes sustainable practices passed down through generations.

The integration of Indigenous knowledge systems into environmental communication practices has led to an approach that is not only much more culturally relevant but also more effective in addressing a wide range of ecological issues faced within the diverse communities across South East Nigeria. These traditional perspectives and practices offer a deeper understanding and appreciation of the local environmental context. Such participation enhances collaboration and encourages community-driven initiatives that further empower local populations in their efforts to manage and protect their natural resources.

Integration of Indigenous Knowledge in Environmental Communication

Environmental communicators have recognized the importance of integration of indigenous knowledge (IK) in their research and practice. IK is seen as important for understanding and addressing environmental changes and promoting sustainability. Integration of IK has been practiced, but often in a limited way. FK has often been added to EKS, but not much thought has been given to how EKS and FK can together build a more holistic understanding of the world. Understanding how communicators see the role of IK in environmental change can help to improve communication between universities, research institutes and grassroots communities. It is also crucial to address the information

needs and communication preferences of grassroots communities (Parsons et al., 2017).

The incorporation of a diverse array of indigenous knowledge systems is essential for understanding and developing far more effective, impactful environmental communication strategies that are in line with, and engage, local communities in meaningful, culturally relevant ways (Mbah, Ajaps & Molthan-Hill, 2021). These invaluable systems provide critical insights and unique perspectives that enrich the ongoing dialogue surrounding pressing environmental issues, facilitating a more inclusive approach to tackling challenges that affect both the planet and the livelihoods of local populations. Embracing this wealth of knowledge can lead to innovative solutions that honor local traditions while addressing contemporary concerns.

Environmental changes threaten the survival of indigenous communities. These communities are often marginalized and their understanding of the environment disregarded. On the other hand, environmental change brings new relevance to IK, as it is often better adapted to local contexts than Western knowledge systems (Henri et al., 2021). Nevertheless, IK is often co-opted and commodified by non-indigenous researchers and institutions. Grassroots communities are also seen as a neglected source of knowledge. African communities have knowledge based on centuries of interaction with their environment, but this local knowledge is often ignored or dismissed. Outsiders have an obligation to listen to and respect this local knowledge (Masuku, 1999). For South East Nigerian environmental

communicators, indigenous epistemologies are the starting point for dealing with environmental issues.

The integration of indigenous knowledge into environmental communication acts as a crucial and essential bridge that connects time-honored traditional practices with contemporary ecological challenges encountered by numerous diverse communities throughout our world today. This significant and vital amalgamation not only enriches our understanding of these multifaceted issues but also enhances the overall effectiveness of our concerted efforts to address the pressing environmental challenges that we face collectively (Mbah, Ajaps & Molthan-Hill, 2021). By incorporating indigenous perspectives into our innovative approaches, one can create a more holistic, inclusive, and sustainable solutions that will yield positive benefits for our environment and society. This incorporation brings forth a wealth of wisdom and insight that has been honed over centuries in order to provide us with invaluable lessons that can guide us in making impactful decisions today.

Conclusion and Future Directions

South East Nigerian environmental communicators' research practices embrace a set of indigenous epistemologies that connect their environmental communication to recognition, respect, relevance, responsibility, and responsive actions towards the environment. The discussion opens prospects for future research on the genres, form, intricacies, and convergence of various indigenous modes of research

practices not limited to African contexts. Such considerations broaden the scope of research practices within academia and outside of it and challenge the Euro-Western dominance of communicative and research practices in African and other global contexts. These issues may require the establishment of an African or global network of interest that brings together scholars vested in indigenous approaches to communication and research practices from diverse philosophical lenses.

Therefore, the thoughtful and mindful integration of indigenous epistemologies into the diverse practices of environmental communication serves to not only enrich the ongoing and evolving dialogue that surrounds the pressing ecological issues currently faced in Nigeria, but it also enhances an understanding of the various cultural contexts that shape these vital interactions and discussions. This approach encourages a much more inclusive and comprehensive perspective, acknowledging and valuing the timeless wisdom that indigenous knowledge systems can offer in addressing and overcoming the contemporary environmental challenges, paving a path towards sustainable solutions that respect local traditions and enhance community engagement.

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