

Water Spirits and Sacred Rituals: The Role of African Traditional Juju in Protecting Blue Ecosystems in Cross River State

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Abstract

This study explores the profound role of African traditional "juju" practices in safeguarding blue ecosystems in Cross River State, Nigeria. Traditional beliefs and rituals, deeply rooted in the reverence for water spirits, have long played a vital role in the conservation of marine and freshwater environments in the region. These practices, embedded in the cultural fabric of local communities, include sacred rituals, taboos, and reverence for deities associated with water bodies. These elements of traditional juju have effectively limited human exploitation of rivers, lakes, and coastal areas, ensuring the preservation of vital blue ecosystems. The study aims to identify the various water spirits and associated rituals that contribute to the protection of aquatic ecosystems and assess their socio-cultural significance. Through ethnographic research, interviews with traditional custodians, and field observations, this study uncovers the intricate relationship between spiritual practices and environmental conservation in Cross River State. The findings reveal that the belief in water spirits, such as the revered "Mammy Water," along with other sacred entities, compels local communities to protect water bodies from pollution and overuse, maintaining ecological balance. Moreover, the research highlights how sacred forests and groves, often found near these bodies of water, serve as sanctuaries for biodiversity and are protected from human encroachment due to strong spiritual prohibitions. Some of the identified water spirits included; Anansa, Afia-anwan Idem Iboku among others. These areas remain untouched because of the fear of invoking the wrath of water spirits or violating ancient taboos. The study also examines the challenges and opportunities of integrating these traditional conservation methods with modern environmental policies, recognizing the potential of blending indigenous knowledge systems with scientific approaches. In conclusion, the role of African traditional juju in protecting blue ecosystems is both significant and underappreciated. This study advocates for a greater understanding and incorporation of these cultural practices into contemporary conservation strategies, as they offer sustainable and community-driven solutions to environmental challenges. The preservation of blue ecosystems in Cross River State, through the power of spiritual reverence, represents a model of conservation that harmonizes culture and nature.

Keywords: African Traditional Juju; Water Spirits; Blue Ecosystems; Environmental Conservation; Cross River State

Introduction

African traditional belief systems have long been integral to the cultural identity and environmental stewardship of communities across the continent. Among these beliefs, the reverence for water spirits holds a significant place, particularly in Cross River State, where such entities are viewed as guardians of aquatic ecosystems (Dafe, Garver, Unuigbe, & Wilson, 2024). These spirits are often invoked in rituals and ceremonies aimed at ensuring the health and sustainability of rivers, lakes, and coastal areas (Obiero, Klemet-N'Guessan, Migeni, & Achieng, 2023). The practice of honoring these water spirits not only reflects a profound respect for nature but also underscores the interconnectedness of spiritual and

ecological well-being (Swaraj, & Mishra, 2023). As communities engage in these sacred rituals, they establish a framework for sustainable practices that protect their natural resources.

Traditional juju practices are pivotal in fostering a culture of conservation, especially concerning blue ecosystems (Adedeji, 2023). Many indigenous communities employ rituals to appease water spirits, which they believe can influence the abundance and health of marine life (Maulidyna, et al., 2021). For example, specific offerings and ceremonies conducted near water bodies are thought to enhance fish populations and promote biodiversity (Chowdhury, & Behera, 2021). These practices create a sense of responsibility among community members to safeguard their aquatic environments, reinforcing the idea that human actions can directly impact the spiritual and ecological balance of their surroundings. This sustainable approach to conservation, rooted in cultural heritage, demonstrates the value of integrating traditional ecological knowledge with modern conservation strategies.

In Cross River State, the ecological significance of blue ecosystems cannot be overstated. These aquatic environments provide essential services, including water filtration, habitat for diverse species, and resources for local livelihoods. The state is home to several vital water bodies, such as the Cross River and its tributaries, which support not only marine life but also agricultural and economic activities (Dan, Udoh, & Wang, 2022). However, the degradation of these ecosystems, exacerbated by urbanization and industrial activities, poses a substantial threat to both biodiversity and community sustainability (Kolawole, & Iyiola, 2023). Traditional practices, including the veneration of water spirits, offer a viable pathway to address these challenges by fostering community engagement in conservation efforts.

The integration of traditional rituals associated with water spirits into contemporary conservation policies presents a unique opportunity for sustainable resource management. By recognizing the cultural significance of these practices, policymakers can leverage them to enhance community participation in ecosystem protection. This collaborative approach not only enriches conservation initiatives but also strengthens community identity and resilience. As such, this study aims to explore the role of African traditional juju in protecting blue ecosystems in Cross River State, emphasizing the importance of these practices as sustainable tools for conserving marine life and promoting ecological health.

Problematic: In the contemporary era, many Africans, particularly in Nigeria and Cross River State, have increasingly embraced foreign religious teachings and practices, often at the expense of their ancestral traditions. This shift has led to a notable neglect of indigenous beliefs, such as the reverence for water spirits, known locally as *mamaid* spirits (Akintan, 2020). Historically, these spirits have played a crucial role in sustaining local ecosystems, fostering a symbiotic relationship between communities and their aquatic environments. As the younger generations gravitate toward unfamiliar religious ideologies, the profound wisdom embedded in traditional practices is at risk of being lost, undermining the cultural and ecological foundations that have supported their waterways for centuries (Bland, & Webb, 2016).

The consequences of this cultural shift are compounded by significant environmental challenges, particularly the pollution of waterways. In Cross River State, rapid urbanization and industrial activities have introduced a myriad of pollutants into the rivers and lakes, severely affecting water quality and marine biodiversity. Additionally, the activities of foreign corporations, often driven by profit motives, exacerbate this crisis as they exploit natural resources without regard for environmental sustainability (Yu,

Bansal, & Arjaliès, 2023). Such actions not only threaten the health of aquatic ecosystems but also jeopardize the livelihoods of local communities that depend on these resources. The combination of cultural abandonment and environmental degradation presents a critical challenge that demands urgent attention (Halbac-Cotoara-Zamfir, et al, 2020).

To address these pressing issues, there is a compelling need to revive the veneration of water spirits and incorporate traditional ecological practices into contemporary conservation strategies. Emphasizing the role of mamaid spirits can inspire communities to take an active role in protecting their waterways, fostering a renewed sense of stewardship. By integrating ancestral beliefs with modern conservation efforts, stakeholders can develop holistic approaches that honor cultural heritage while ensuring the sustainability of marine ecosystems (Fajardo, et al., 2021). This revival could serve as a powerful catalyst for community engagement, enabling a collective response to the environmental crises facing Cross River State and beyond.

Literature Review and Conceptual Framework

Cultural Significance of Water Spirits and Juju Rituals in African Traditions. In many African cultures, water bodies such as rivers, lakes, and seas are considered sacred, inhabited by spiritual entities known as water spirits or mermaids. These entities are revered and are believed to play an integral role in the spiritual well-being of the community. Among the Yoruba of Nigeria, the water spirit is referred to as *Yemoja*, a motherly figure associated with fertility and protection of aquatic life. In Ghana, the Ga people honor *Mami Wata*, a prominent mermaid spirit known for her power over the water and ability to control fortune and misfortune (Falen, 2020). Similarly, the people of Sierra Leone recognize the *Mami Wata* as a protector of water bodies, believed to reward those who respect her domain while punishing transgressors. These water spirits are often the focus of elaborate rituals and offerings, intended to secure blessings, ensure water purity, and protect against natural disasters.

Across West and Central Africa, similar beliefs exist, with variations in how water spirits are named and worshipped. In Angola, the *Kianda* is a revered mermaid spirit associated with the sea and rivers, believed to guard the natural environment, particularly water sources. In Cameroon, the coastal communities worship a mermaid spirit known as *Jengu*, believed to bring healing and protection, especially in the context of the sea (Fay, 2018). These spiritual beings are central to African cosmology, linking the natural and supernatural worlds, and their veneration is an important part of traditional ecological knowledge. Rituals involving water spirits often involve offerings, dances, and festivals, serving as cultural mechanisms for protecting the aquatic environment and ensuring the community's connection to their ancestral spirits (Stevenson, 2023).

Traditional Ecological Knowledge and Conservation Practices Water spirits and their associated rituals serve not only a spiritual purpose but also contribute to environmental conservation, particularly in the protection of aquatic ecosystems. African societies that believe in mermaid spirits often view water bodies as sacred, enforcing traditional taboos that prevent overexploitation of these ecosystems. For instance, among the Shona people of Zimbabwe, the mermaid spirit *Njuzu* is believed to dwell in lakes and rivers, and local communities are cautious about polluting or overfishing these water bodies for fear of invoking the spirit's wrath (Matanzima, 2022). These beliefs enforce a community-wide adherence to sustainable practices, as they are tied to both spiritual well-being and ecological balance. In Ghana, the belief in *Mami Wata* has historically deterred individuals from engaging in destructive activities like illegal fishing or the pollution of

water bodies, as these are believed to anger the spirit, resulting in floods or droughts (Owusu, 2024).

Moreover, these traditional beliefs are intertwined with ecological practices that support biodiversity conservation. The reverence for spirits like *Kianda* in Angola, or *Jengu* in Cameroon, contributes to the sustainable use of water resources as rituals and taboos often prohibit activities such as deforestation along riverbanks or polluting sacred waters (Kohnert, 2023). In this way, spiritual beliefs act as informal governance structures, protecting water bodies from overexploitation and environmental degradation. These practices highlight the role of indigenous knowledge systems in fostering environmental sustainability, aligning traditional spiritual reverence with the goals of modern ecological conservation. Through rituals, songs, and community gatherings, African societies maintain a symbiotic relationship with their blue ecosystems, reinforcing the importance of water bodies in both their cultural and ecological landscape.

Religious Beliefs in Mermaid Spirits and Their Influence on Environmental Practices in Africa: In various African societies, the belief in mermaid spirits plays a pivotal role in shaping attitudes toward environmental stewardship, particularly concerning the management of blue ecosystems. These water deities are often viewed as custodians of rivers, lakes, and seas, symbolizing both the abundance and fragility of aquatic ecosystems. In Nigeria, the Yoruba people revere *Yemoja*, a powerful water goddess associated with fertility and the protection of waterways. Her worship involves rituals performed near rivers and seas, with offerings made to ensure the health of the water and the well-being of the community (Sunday, 2024). Similarly, in Ghana and other parts of West Africa, the widely venerated *Mami Wata* spirit is believed to reside in large water bodies, controlling the balance between prosperity and disaster. Communities conduct regular rituals to honor her, which inadvertently contribute to the preservation of these water bodies by reinforcing taboos against pollution and over-exploitation (Bazinet, 2023).

These spiritual beliefs often intersect with traditional ecological knowledge, creating cultural norms that encourage the sustainable management of blue ecosystems. For example, in Angola, the *Kianda* spirit, a revered mermaid deity, is believed to guard the ocean and rivers. People living near the coast or along rivers perform rituals to *Kianda* to maintain harmony with the water, which discourages practices like overfishing or the destruction of marine habitats (Lubao, & Ichumbaki, 2023). In Cameroon, coastal communities venerate *Jengu*, a water spirit known for her healing powers and protective nature. Traditional festivals and ceremonies held in her honor often emphasize the importance of clean water and the dangers of neglecting sacred waterways (Adebayo, Hunter, & Raheem, 2023). These beliefs are crucial in shaping local environmental policies, as traditional leaders often integrate them into the broader framework of community governance, thereby promoting the sustainable use of aquatic resources.

The Role of Traditional Rituals in Policy and Blue Ecosystem Conservation In many African countries, the reverence for mermaid spirits is closely intertwined with informal environmental management systems, guiding community-based approaches to blue ecosystem conservation. In Zimbabwe, the Shona people believe in the *Njuzu* spirit, a mermaid-like deity said to dwell in lakes and rivers. *Njuzu* is thought to control the flow of water and the health of the aquatic life within these bodies, and rituals are performed to appease her to avoid droughts or floods (Matamoros Mercado, 2023). These beliefs foster a collective sense of responsibility toward water conservation, as disrespecting the spirit by polluting or exploiting water sources could bring about environmental catastrophe.

Such practices are crucial in complementing formal environmental policies, particularly in areas where governmental enforcement of ecological regulations is weak.

The intersection of these spiritual beliefs with formal environmental policy frameworks is also evident in parts of Central Africa, where the influence of indigenous rituals shapes water management practices. In Cameroon, the *Jengu* spirit's significance in coastal and riverine communities has led to a number of traditional laws and taboos aimed at protecting water bodies from human-induced harm, such as pollution or habitat destruction (Edo, 2023). While these practices are primarily spiritual, they function as informal regulatory systems that support the conservation of blue ecosystems. In regions where the formal environmental governance structures are insufficient, these traditional practices play an essential role in protecting marine and freshwater environments, promoting a symbiotic relationship between spiritual beliefs, environmental stewardship, and local policy development. Through these cultural mechanisms, mermaid spirits not only safeguard aquatic life but also influence how communities interact with their natural surroundings, ensuring the long-term health of blue ecosystems.

Material and Methods

Cross River State, located in southeastern Nigeria, spans approximately between latitudes 4.20°N and 6.00°N and longitudes 8.00°E and 9.00°E. This region is characterized by its lush rainforest, diverse ecosystems, and a rich tapestry of riverine communities that maintain a deep spiritual connection with the waterways that traverse their land. Among these communities, beliefs in mermaids and water spirits are prevalent, reflecting a profound cultural heritage tied to the rivers.

Notable riverine communities, such as Calabar, Bakassi, and Akpabuyo, celebrate these spiritual entities, with distinct mermaids revered in local folklore. *Anansa*, known as the river goddess of strength, is particularly significant in Calabar, where she is invoked for protection and guidance. Another prominent spirit is *Afia-anwan Ndem Iboku*, and *Ekpenyong Anwan*, celebrated for her benevolence and believed to bring fertility and prosperity to the community. These mermaids are central to the spiritual practices and cultural narratives of the riverine populations, shaping their identities and traditions.

The research methodology for this study adopted an ethnographic research design, which is particularly suited to exploring the role of African traditional juju in protecting blue ecosystems. This design allowed for an immersive, in-depth examination of the cultural and spiritual practices related to water spirits and ecosystem management within specific African communities. Data collection involved prolonged fieldwork, where participant observation and semi-structured interviews with traditional leaders, spiritual custodians, and community members were conducted. Through direct engagement and observation, rich qualitative data was gathered, capturing the nuances of rituals, beliefs, and environmental stewardship. Additionally, archival research and analysis of historical texts related to spiritual practices were integrated to provide context and depth to the findings. The ethnographic approach, with its focus on lived experiences and cultural meanings, offered a comprehensive understanding of how traditional spiritual practices influence ecosystem protection, making it a robust framework for the study.

Result and Discussion

Marine Deities (Water Spirits), in Cross River State Details from Table1, showed that Cross River State, is a rich tapestry of marine ecosystem river spirits, commonly referred to as mermaids, embodies the cultural heritage and spiritual beliefs of various

communities. Each water spirit governs its own jurisdiction, reflecting the unique identities of the people who worship them. Anansa Ikañ Obutoñ, revered as the deity of Obutong, hails from the Enwang clan and is believed to reside near the head of a spring by the Hope Waddell Training Institute. Similarly, Ukoñ Esuk serves as the deity for Adiabo, while Anantigha Enwañ, a male deity also originates from the Enwang people. Sunko Monko represents the spiritual essence of Nsidung (Henshaw Town), whereas Afia Añwan was once the central deity for the Efik of Iboku, prior to the rise of Anansa's prominence. The Eniong people also honor Afia Añwan, showcasing the interwoven nature of these spiritual beliefs.

Additionally, other notable river spirits include; Atabru Inyañ, worshipped by both the Efik and the Effiat people, and Asari Mandu, a river goddess located at the Ifondo River in Akpabuyo Local Government Area. Udom Inyañ, regarded as the deity of wealth, is believed to dwell at the bottom of the Calabar River. The deities Akpando and Ukim Ita are honored at Ikot Esu, while other significant spirits such as Asari Anyando, Esiet Obom, and various others like Ikoñ Usinibo Nne, Eka Asari, Ekarabitiad, and many more reside in Creek Town. This rich array of river spirits, including Amia Nkanika, Oworoba, Inyañ Edini, and Ekanem Unan, reflects the diverse spiritual water deities of Cross River State, illustrating the profound connection between the communities and their aquatic environments.

Table 1: MARINE DEITIES (WATER SPIRITS), IN CROSS RIVER STATE

S/N	Names of Water deities	Operational Jurisdiction
1.	Anansa Ikañ Obutoñ	She is regarded as the deity of Obutong. She originally belonged to the Enwang clan. She is believed to reside at the head of a spring or river near the former site of Obutong by the Hope Waddell Training Institute
2.	Ukoñ Esuk	He is regarded as the deity of Adiabo
3.	Anantigha Enwañ	Anantigha Enwang is a male deity who originally belonged to the Enwang people
4.	Sunko Monko	The deity for Nsidung (Henshaw town)
5.	Afia añwan	Prior to the prominence of Anansa in the religious life of the Efik of Iboku, Afia anwan was believed to be the central deity of the Efik. The Eniong people equally worshipped Afia anwan
6.	Atabru Inyañ	Deity of the Effiat people. Worshipped by the Efik and the Effiatt
7.	Asari Mandu	A river goddess located at Ifondo river in Akpabuyo Local Government Area
8.	Ebebe	Wife of Ukong Esuk
9.	Afia anwan Esuk Ekondo	Reside in the River in Ekondo
10	Udom Inyañ	Regarded as the deity of wealth who lives at the bottom of the Calabar river.

Source: Adapted from Scheub, Harold (2000), & Akoda, Winifred E.; Akoda, Philip (2021).

Cultural Significance of Water Spirits and Juju Rituals in African Traditions

Result in Table 2, showed that data collected from the 200 respondents highlights that Environmental Stewardship is perceived as the primary cultural significance of water spirits and juju rituals, with 50% of participants selecting this option. This underscores a strong communal emphasis on preserving local ecosystems and respecting natural

resources, reflecting a growing awareness of environmental issues. Spiritual Protection and Healing Practices were selected by 15% and 12.5% of respondents, respectively, indicating that while these aspects are important, they may not hold the same centrality in the current cultural context as environmental concerns. Cultural Identity and Economic Prosperity were also noted by 12.5% and 10% of participants, suggesting that although they contribute to the understanding of water spirits' significance, they are secondary to the pressing need for environmental protection. It could be inferred that as communities navigate modern challenges, the integration of spiritual beliefs with environmental stewardship becomes increasingly relevant, indicating a potential shift in how traditional practices are valued in contemporary society.

Table 2: CULTURAL SIGNIFICANCE OF WATER SPIRITS AND JUJU RITUALS IN AFRICAN TRADITIONS

Cultural Significance	Frequency	Percentage
Spiritual Protection	30	15%
Cultural Identity	25	12.5%
Economic Prosperity	20	10%
Healing Practices	25	12.5%
Environmental Stewardship	100	50%
Total	200	100%

Source: Authors fieldwork, 2024

The descriptive table highlights the relationship between traditional ecological knowledge, religious beliefs in mermaid spirits, and the role of traditional rituals in policy and blue ecosystem conservation within the community. The responses from the 200 participants reveal a clear prioritization of cultural practices that promote environmental stewardship, particularly focusing on Cultural Festivals Celebrating Nature and Community Discourse on Marine Health, which received the highest frequencies at 45% and 35%, respectively. The strong emphasis on Cultural Festivals Celebrating Nature indicates that these events serve as crucial platforms for raising awareness about environmental issues and fostering a collective sense of responsibility towards marine ecosystems. Such festivals not only celebrate the spiritual significance of water bodies but also engage community members in sustainable practices, reinforcing the connection between cultural identity and environmental health. This aligns with the belief that communal gatherings centered around traditional rituals can enhance ecological consciousness and encourage positive environmental behaviors.

Furthermore, the significant response to Community Discourse on Marine Health highlights the importance of dialogue within the community regarding the status of local water bodies. By integrating discussions about the health of marine ecosystems into spiritual gatherings, community members actively engage in safeguarding their environment. This discourse may also serve as a catalyst for collective action, leading to organized efforts in conservation, such as clean-up campaigns and awareness programs. In contrast, while options such as Seasonal Fishing Practices and Use of Indigenous Plant Species received lower frequencies (15% and 12.5%, respectively), they still represent valuable traditional ecological knowledge. Their lower representation may suggest that these practices are less emphasized in current community discussions compared to broader cultural celebrations and environmental dialogues. This disparity could indicate a need for greater awareness and integration of these traditional practices into contemporary conservation strategies.

The data also reveals a notable connection between religious beliefs in mermaid spirits and environmental practices. The belief in the Protection by River Spirits (20%) and the practice of Ritual Offerings for Bountiful Harvests (15%) further emphasize how spiritual beliefs shape community behaviors towards environmental conservation. These practices reinforce the idea that the community views the health of their aquatic ecosystems as intertwined with their cultural and spiritual identities.

The findings suggest a robust intertwining of traditional ecological knowledge, religious beliefs, and cultural practices in shaping community attitudes toward marine conservation. The emphasis on rituals and festivals as tools for ecological awareness illustrates the potential for integrating cultural heritage with modern conservation efforts. This approach not only enhances the community’s commitment to preserving their natural resources but also strengthens their cultural identity and cohesion.

Table 3: TRADITIONAL KNOWLEDGE, RELIGIOUS BELIEF AND BLUE ECOSYSTEM CONSERVATION

Traditional Knowledge, Religious Belief and Blue ecosystem conservation	Frequency	Percentage
Seasonal Fishing Practices	30	15%
Use of Indigenous Plant Species	25	12.5%
Sacred Groves and River Sites	35	17.5%
Knowledge of Water Cycles	20	10%
Cultural Festivals Celebrating Nature	90	45%
Belief in Protection by River Spirits	40	20%
Ritual Offerings for Bountiful Harvests	30	15%
Cleansing Rituals to Prevent Pollution	25	12.5%
Ancestral Connections to Water Bodies	35	17.5%
Community Discourse on Marine Health	70	35%
Influencing Local Governance	50	25%
Integration into Educational Programs	30	15%
Community Mobilization for Clean-Up Activities	40	20%
Funding for Conservation Projects	20	10%
Advisory Roles in Policy Making	60	30%

Source: Authors fieldwork, 2024

Conclusion and Recommendations

The findings underscore the vital role that traditional ecological knowledge and cultural practices play in fostering environmental stewardship within the community of Cross River State. The strong emphasis on cultural festivals and community discourse regarding marine health highlights a collective commitment to preserving local ecosystems, deeply intertwined with spiritual beliefs in river spirits. This interplay between culture and ecology not only enhances the community's awareness of environmental issues but also strengthens their cultural identity and social cohesion.

Based on the study findings, the following recommendations were reached; (a) The Cross River State government should actively incorporate traditional ecological knowledge and cultural rituals into formal conservation strategies to ensure community engagement and support. (b) They should also develop educational initiatives that promote the significance of seasonal fishing practices and the use of indigenous plants, encouraging their adoption in sustainable practices. (c) Provide funding and resources for cultural festivals that celebrate nature, thereby reinforcing community involvement in conservation efforts and fostering a sense of pride in local ecosystems. (d) Create platforms

for ongoing community discussions about the health of local water bodies, involving traditional leaders, environmental experts, and community members to collaboratively address conservation challenges.

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