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Indigenous Knowledge and Politics of Coastal Resource Management in the Ilaje Communities, Ondo State, Nigeria

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Abstract
This study investigated the role of indigenous knowledge in coastal resource management within the Ilaje communities of Ondo State, Nigeria. The study examined the intricate relationship between traditional ecological knowledge, local governance structures, and resource management practices. It emphasised the significance of incorporating indigenous perspectives into contemporary coastal resource management. The objectives of the study were to: document indigenous knowledge systems used in coastal resource management; assess the integration of these systems into local and regional policies; and provide recommendations for incorporating indigenous knowledge in sustainable resource management. The study employed a mixed-methods approach, involving participatory mapping, interviews, focus group discussions, and document analysis. The theory of commons governance served as the theoretical framework, underscoring the importance of local institutions and knowledge systems in managing shared resources. The findings revealed a rich indigenous knowledge present within Ilaje communities, including traditional fishing practices, sacred groves, and local conservation measures. However, the integration of this knowledge into local and regional resource management policies and practices remains limited, resulting in ineffective governance. Key barriers include inadequate recognition and documentation of indigenous practices and insufficient dialogue between local communities and government agencies. In conclusion, the study recognised that incorporating indigenous knowledge into community-based management plans has enormous potentials to improve the resilience and sustainability of coastal ecosystems. To address these challenges, the study recommended documenting and recognising the values of indigenous knowledge, facilitating dialogue and partnerships between communities, researchers, and policymakers, and integrating indigenous knowledge into formal education and capacity-building programmes. Overall, the study highlighted the importance of indigenous knowledge in sustainable coastal resource management and offered insights for incorporating local practices and perspectives into contemporary governance strategies in Nigeria and beyond.

Keywords: Indigenous Knowledge, Community-based Management, Coastal Resource Management, Sustainability, Ilaje Communities

Introduction

The study is situated in the context of Ilaje communities, which are located along the coast of Ondo State, Nigeria. The communities have a rich history of fishing, farming, and forestry; they have been key components of their livelihoods for generations (Martins, & Adefioye, 2010). However, these activities have been under pressure from population growth, climate change, and coastal development, leading to concerns about the long-term sustainability of local resources. In response to these challenges, various stakeholders, including government agencies, NGOs, and community organisations, have attempted to implement coastal resource management strategies. The issue of coastal system sustainability has gained significant importance for numerous coastal towns across the globe, especially in the areas mentioned (Urdaneta-Antolin, 2015; Onyejekwe, 2008). These ecosystems support cultural values, a source of income, and food security, all of which are essential to human well-being. However, they are also susceptible to different human activities.

Pressures on natural resources, such as overfishing, pollution, and climate change, have resulted in notable environmental changes for the coastal towns of Ilaje in Ondo State, Nigeria. In many coastal communities, indigenous knowledge and practices have been essential to the management of natural resources. But it is unclear how effective these methods are in the face of contemporary difficulties. In addition, community-based management strategies have been suggested as a possible way to deal with environmental issues; however, political unpredictability, a lack of funding, and insufficient enforcement mechanisms sometimes restrict their efficacy (Bulkeley, Edwards & Castan, 2019). The traditional management techniques used in the Ilaje villages have developed over many generations and are deeply ingrained in cultural customs and beliefs. In certain cases, the quantity of fish stocks has been preserved because it is customary taboos to fish in particular places during particular seasons of the year, such as during a reproductive season of a species.

Traditional management techniques such as forbidding logging and the manufacturing of charcoal have helped to preserve the mangrove forests, which are essential in reducing the effects of storms and shielding the shoreline from erosion (Anderson, 2001).

By examining the functions of indigenous knowledge in community-based management of coastal ecosystems in the Ilaje villages of Ondo State, Nigeria, the coastal ecosystems in the Ilaje towns are increasingly under threat from human activities such as overfishing, pollution, and coastal development. They are also susceptible to the effects of climate change and environmental degradation. The livelihoods of the communities that depend on these ecosystems and their sustainability are at risk due to these pressures. Although conventional management techniques have been crucial in keeping these ecosystems healthy, it is unclear how effective they will be in the face of contemporary challenges. Innovative techniques that combine modern technology and tactics with the advantages of old knowledge are needed for community-based management (Shanks & Ison, eds. 2011). Due to their low-lying coastal locations, many Ilaje settlements are vulnerable to pollution and overfishing, which puts their agricultural and fishing industries at risk.

The residents of the towns have shown resilience and creativity in adjusting to these changes in spite of these difficulties. The interests and rights of indigenous groups must be given priority in the creation of more comprehensive and culturally understandable approaches to development in order to solve these issues. This calls for a deeper comprehension of the ecological, social, and cultural elements that support the resilience of the Ilaje communities as well as the obstacles preventing them from fully engaging in development projects. How indigenous knowledge may be incorporated into community-based management plans and how well these plans can handle outside pressures and disputes over resource use are little understood. To tackle these obstacles, a deeper comprehension of the function of indigenous knowledge in community-based management and the elements that either support or undermine its efficacy is required. Analysing how stakeholder engagement tactics, governance frameworks, capacity-building requirements, and social and cultural aspects influence how coastal ecosystems are managed in Ilaje villages. However, it is also important to address the issues that indigenous people face, such marginalisation, poverty, and scarcity of resource, which can make it difficult for them to participate fully in development projects.

The objectives of the study are to: identify and analyse the role of indigenous knowledge in coastal resource management practices in Ilaje communities, Ondo State, Nigeria; and examine the barriers preventing the integration of indigenous knowledge in the management of coastal resource management.

The significance of the study lies in its potential to yield valuable insights and contributions on multiple fronts. Firstly, the study emphasises the importance of indigenous knowledge in contemporary resource governance. By examining the intricate relationship between traditional ecological practices, local institutions, and resource management, the research highlights the need for policymakers and practitioners to recognise and integrate indigenous knowledge into their management strategies. This can contribute to more inclusive, equitable, and sustainable governance models that are better adapted to local contexts and need. Secondly, the research can facilitate the development of evidence-based policies and interventions. By investigating the extent to which indigenous knowledge is currently incorporated into resource management policies and identifying barriers and facilitators to its integration, the study

offers practical insights into how local and regional governance structures can be improved. This can result in more effective and context-specific approaches to coastal resource management in Nigeria and beyond. Thirdly, the study contributes to the broader academic discourse on environmental governance, indigenous knowledge systems, and sustainable development. Its findings and recommendations have the potential to inform debates and research in various disciplines, such as political science, anthropology, and ecology. By promoting interdisciplinary insights and understanding, the research can advance our collective knowledge of the complex social-ecological challenges facing coastal communities worldwide. Finally, the study serves as a catalyst for further dialogue and collaboration between various stakeholders, including local communities, researchers, policymakers, and practitioners. This can lead to more resilient communities and ecosystems, as well as a greater sense of ownership and empowerment among users of local resources.

The scope of the study is a broad area and interdisciplinary, combining social, political, and environmental factors in the analysis. It seeks to understand how local communities in Ilaje use their traditional knowledge and practices to manage fishing, farming, and forestry activities, and how these practices are shaped by cultural, social, and political factors such as the local norms, beliefs, and values of the people in the area. More so, the study considers the integration of indigenous knowledge in the management of coastal resources and how this can as well be integrated into state-led coastal resource management policies and practices, with the aim of promoting more effective and sustainable resource management in Ilaje communities and beyond. More importantly, the role of local actors in coastal resource management are adequately examined in the study.

Conceptual Review

The conceptual review is centred on the community-based natural resource management (CBNRM) which emphasises the value of community cooperation and participation in resource management, including the use of traditional knowledge. The concept was first discussed in the 80s and 90s in reaction to the shortcomings of state-led, top-down conservation initiatives that frequently disregarded the requirements and viewpoints of local populations. This kind of resource management aims to include nearby communities in the preservation and upkeep of natural resources. It is predicated on the notion that local populations, on whom their livelihoods depend, possess important knowledge and have a stake in the long-term sustainability of the natural resources (Porter & Campbell, eds., 2014). The theory, which emphasises the value of including local populations in decision-making processes and the management of natural resources, is based on a number of fundamental ideas. It also encourages the growth of robust, self-governing organisations that are capable of managing natural resources and acknowledges the significance of community ownership of natural resources.

However, the concept – CBNRM, encourages the sustainable use of natural resources, acknowledging their significance for local livelihoods and economic growth in addition to their importance for the preservation of biodiversity (Schroon & Ramakrishna, 2009). Globally, community-based natural resource management, CBNRM, has been used in many different situations. In fact, it has shown to be a successful strategy in many instances, helping to overcome some of the drawbacks of top-down conservation methods that exclude local populations. CBNRM ensures that natural resource management is accountable to the needs and viewpoints of individuals who rely on these resources for their livelihoods by incorporating local communities in decision-making processes. Additionally, it aids in addressing the issue of the "tragedy of the commons," which occurs when people overuse shared resources for personal benefit. Apart from these advantages, community-based natural resource management (CBNRM) offers a crucial platform for community empowerment as it gives local people the authority to take charge of their natural resources and decide how best to manage and use them.

As a result, community members are more likely to have a feeling of pride and accountability, which can support long-term efforts to manage and conserve natural resources. Although, community-based management of natural resources has its disadvantages. Implementing it, for example, might be challenging in regions with considerable animal conflict because local people may see wildlife as a threat rather than a resource. Indigenous knowledge (IK) and community-based natural resource management

(CBNRM) are cutting-edge methods to conservation and natural resource management, claim Mwangi & Cocks (2013). Although encouraging sustainable resource use is the aim of both programmes, their theoretical underpinnings and practical execution techniques diverge. The significance of community ownership and local engagement in natural resource management is emphasised by CBNRM. CBNRM seeks to promote a feeling of ownership and accountability among local communities via their participation in decision-making processes, resulting in more efficient and sustainable resource management.

Numerous contexts have seen the effective application of indigenous knowledge and community-based natural resource management which has enhanced livelihoods, promoted social equality, and boosted biodiversity. Nevertheless, power dynamics, competing interests, and the difficulties of fusing old knowledge with contemporary research pose obstacles to a successful implementation. A number of case studies of effective CBNRM and IK implementation were included in the edited volume by Sajikni & Adams (eds., 2005). These include community-based forest management in Nepal, community-based fisheries management in the Philippines, and traditional fire management by indigenous peoples in Australia. Moreover, the accomplishments of the IK and CBNRM methodologies underscore the significance of governmental frameworks endorsing community-based natural resource management. This includes laws that honour and safeguard traditional knowledge, encourage community involvement and ownership, and offer financial incentives for the wise use of natural resources.

Regarding frameworks for the policy, there has been a rising acknowledgement of the significance of CBNRM in global conservation and development initiatives. The Convention on Biological Diversity (CBD) acknowledges the value of customary knowledge and methods for conservation, and several national governments have put CBNRM-supporting laws into place. For example, the Community-based Natural Resource Management Policy of Kenya (2004) highlights the significance of community ownership and engagement in natural resource management (Harvey, Boyce & Rutagarama, 2004; Owino, & Khan, 2008).

Nonetheless, a number of obstacles prevent CBNRM from being implemented effectively. A critical examination of the drawbacks and difficulties of CBNRM, such as resource shortages and political meddling, is given by Murphree (2000). Significant financial and human resources are frequently needed for CBNRM, but these resources are not always available, especially in low-income nations. He went on to say that local communities might not have the necessary skills to manage natural resources in an efficient manner, especially if they have not used CBNRM before. Furthermore, Agrawal (2004) highlighted political meddling as one thing that might jeopardise community-based efforts when he was examining the connection between politics and CBNRM.

Nonetheless, the significance of gender in indigenous knowledge (IK) and community-based natural rural management (CBNRM) has been acknowledged. The gendered dynamics of natural resource management and their consequences for community development and conservation have been the subject of several studies. For example, Wanyeki et al. (2003) discovered that, although women in Kenya were heavily involved in preserving their local forests, they were frequently left out of resource management decision-making processes. This exclusion may result in gender-blind policies that disregard women's particular expertise, needs, and viewpoints. Numerous studies and projects have demonstrated the important contribution that indigenous knowledge and community-based natural resource management can make to the achievement of sustainable development goals. In their thorough examination of indigenous communities' and peoples' roles in conservation, Waylen et al. (2017) emphasised the important contributions that these groups make to the preservation of biodiversity, the creation of sustainable livelihoods, and the welfare of humankind. This guarantees the long-term viability of natural resources for future generations in addition to protecting ecosystems. Another way that CBNRM and IK may help local food production and security is by promoting traditional agricultural and food production methods, which frequently depend on biodiversity and the sustainable use of natural resources. McLeod et al. (2018) emphasised this approach as a means of enhancing resilience via community-based natural resource management.

Theoretical Framework

Commons governance theory, rooted in the work of Elinor Ostrom and other scholars, addresses the management and utilisation of common-pool resources (CPRs) such as forests, fisheries, and irrigation systems (Ostrom, 1990; Dietz, Ostrom, & Stern, 2023). These resources are characterised by the difficulty of excluding users and the subtractability of resource units, leading to potential overuse and degradation, a situation often referred to as the "tragedy of the commons." In response to this challenge, the theory of commons governance emphasises the role of local institutions and self-governing arrangements in managing CPRs sustainability. It highlights the importance of collective action and cooperation among resource users in developing and enforcing rules to regulate resource use, resolve conflicts, and ensure equitable distribution of benefits. This approach challenges conventional wisdom that relies on centralised government control or privatisation of resources as the primary solutions to commons dilemmas.

Commons governance theory identifies a set of design principles that contribute to the success of self-governing institutions (Cox, M., Arnold, G., & Villamayor-Tomas, S., 2010). These include clearly defined boundaries, congruence between rules and local conditions, inclusive decision-making processes, effective monitoring and enforcement mechanisms, and conflict resolution mechanisms, among others (Agrawal, 2001; Poteete, Jansen, & Ostrom, 2010). By understanding and applying these principles, communities and policymakers can develop more effective and sustainable strategies for managing CPRs.

It is essential to understand that the theory emerged as a response to the limitations of two traditional approaches to managing common-pool resources: centralised government control and privatisation. The centralised government control approach assumes that a single authority can effectively manage and regulate access to resources. However, this approach often fails to consider the diverse needs and knowledge of local resource users, leading to ineffective policies and conflicts. On the other hand, the privatisation approach suggests that resources should be divided and assigned to individual owners, who would have an incentive to use sustainably. Yet, this method disregards the interconnected nature of many resources and can result in inequitable distribution and overuse by individual owners. Commons governance theory presents an alternative approach, advocating for the establishment of self-governing institutions that involve local resource users in decision-making and rule enforcement. This approach emphasises the importance of collective action, cooperation, and communication among resource users, enabling them to develop context-specific management strategies that are both equitable and sustainable. The theory drew attention to the numerous successful examples of self-organisation and collective action in managing common-pool resources worldwide. The proponent research highlighted that local communities, through shared norms and institutions, could overcome the "tragedy of the commons" and develop effective resource governance systems (Ostrom, Burger, Field, Norgaard, Policansky, 1999).

The study is justified through several interconnected reasons that establish its relevance and significance. Firstly, preserving indigenous knowledge related to coastal resource management in the Ilaje communities is critical to safeguarding their unique cultural heritage. Understanding and documenting traditional ecological practices can foster a greater appreciation for local customs and help maintain the connection between communities and their environment. Secondly, integrating indigenous knowledge into contemporary coastal resource management strategies can empower local communities and bolster their participation in decision-making processes. By acknowledging and incorporating traditional practices, governance structures can become more equitable, effective, and responsive to the unique needs of the local population. Thirdly, the utilisation of traditional ecological knowledge has the potential to promote sustainable and resilient resource management. These practices, refined over generations, reflect a deep understanding of local ecosystems and their complex dynamics. By blending this invaluable knowledge with modern scientific approaches, coastal resource management can be optimised to address the challenges of environmental change and increasing resource pressures. By exploring the role of indigenous knowledge in coastal resource management in the Ilaje communities, the study aims to contribute to policy and practice, promote social and environmental justice, and advance the sustainable governance of coastal resources not only in Nigeria but also across the globe.

Methodology

This work employed a qualitative research methodology, using semi-structured interviews. Using this approach, community members were interviewed in-depth to learn more about their experiences with, and understanding of, coastal ecosystems and management techniques. A flexible interview scheduled with open-ended questions and requests for additional detailed information served as the basis for the interviews. In order to better understand the opinions and experiences of a group of community members on the management of the coastal ecosystem, focus groups were also investigated as a means of facilitating talks. A variety of viewpoints and experiences could be shared and explored throughout the talks, which were facilitated by open-ended questions and prompts.

Significantly, there was also an anthropological fieldwork involved. By living and working in the community for a whole year, the study team was able to obtain a greater knowledge of the social, cultural, and economic background of coastal ecosystem management. Community leaders such as chiefs, elders, religious leaders, and young people with knowledge and influence over community management practices were among the stakeholders involved in the data collection process. Local community members in the Ilaje communities have a direct and intimate relationship with the coastal ecosystems and their management practices. More significantly, the Ilaje communities' own specialists in coastal ecology, resource management, and community development who helped by offering insightful advice and critical insights into the benefits and difficulties of managing coastal ecosystems sustainably.

Findings of the Study

The Roles of Indigenous Knowledge adopted among the Community Members in the Management of their Coastal Ecosystems in Ilaje Communities, Ondo State, Nigeria

An exceptional cultural legacy and traditional knowledge system have long been entrusted to the Ilaje people, a coastal ethnic group in Ondo State, Nigeria. The sustainable growth of the communities has been made possible to a large extent by their rich indigenous ways. This section examines the indigenous methods used by the Ilaje people to guarantee sustainable development, emphasising the tactics for resource management, community-based governance, traditional ecological knowledge, and cultural preservation.

Cultural Preservation: Cultural preservation is the main focus of the Ilaje people's efforts towards sustainable development. The distinctive cultural practices of the Ilaje groups are well known and essential to their sense of self and social cohesion. Traditional music, dances, and ceremonies are some of these practices. The conclusions of the study demonstrate that these traditions function as both celebrations of cultural history and means of disseminating crucial knowledge about resource management, conflict resolution, and environmental preservation. For example, the annual "Ugbonla" festival serves as a platform for the sharing of indigenous knowledge about the best times to cultivate, harvest, and fish in addition to being a cultural event. By preserving and honouring their cultural past, the Ilaje people ensure that the traditional wisdom necessary for sustainable development is passed down to future generations.

Traditional Ecological Knowledge: The study also indicates that one of the least understood aspects of the Ilaje people's coastal environment is the mangrove ecosystem, which is crucial to their way of life. Their traditional ecological knowledge (TEK), include knowledge of fish behaviour, weather patterns, and the sustainable use of mangrove resources. As a result of this knowledge, they have been able to adapt their agricultural and fishing practices to the unique local climate and seasonal fluctuations. The Ilaje people's traditional ecological knowledge is vital in promoting sustainable resource management. They understand, for instance, how crucial it is to allow mangroves to repopulate since doing so stops soil erosion and maintains the ecological balance. This approach ensures the longevity of their resources while also aiding the preservation of the entire ecosystem.

Community-based Governance: Community-based governance is another traditional tactic that has helped the Ilaje people achieve sustainable development. The customary governance institutions of the community ensure that development initiatives align with the goals and aims of the community through consensus-building and collective decision-making. The Olojas, or community leaders, are in charge of

overseeing resource management and maintaining social peace. Through the efforts of this local leadership, opinions of everyone are heard and conflicts are resolved in a way that best serves the community as a whole. The political system the Ilaje people ensures that their ecological knowledge, customs, and culture will be preserved and protected.

Resource Management Strategies: Resource management is the cornerstone of the approach of the Ilaje people to sustainable development. Their ideas for managing forestry, fishery, and agriculture are deeply grounded in traditional practices. For instance, the "Kangba" method entails community members cooperating to produce crops and clean farmlands. It is discovered that the method increases agricultural output, promotes community togetherness, and reduces labour expenses. The "Awure" method, one of the traditional fishing methods used by the Ilaje people, is more environment-friendly and sustainable. Additionally, the "Awure" celebration serves as a preventive measure by heralding the beginning of the fishing season and proclaiming closed seasons to allow fish populations to recover. To sum up, the indigenous practices of the Ilaje people have been essential to achieving sustainable development in their coastal villages. Their commitment to community-based governance, resource management, traditional ecological knowledge, and cultural preservation is an illustration of how modern development goals may coexist with indigenous practices. Beyond the aforementioned highlights, the residents of the community feel that the community can grow and reach greater heights if its farming, fishing, yearly festivals, swimming ability of their children, and other resources are fully utilised. This, in turn, helps to highlight the uniqueness of the community for recognition on a national and international scale.

Barriers Preventing the Effective Integration of Community-based Management Strategies in the Ilaje Communities

Effective integration of community-based management solutions in the Ilaje villages may be hampered by a number of factors. These include:

Poverty: It may be challenging for community members to devote time and money to sustainable management techniques due to the high rates of poverty in the Ilaje areas.

Lack of Awareness: It is possible that a large portion of the populace is unaware of the significance of coastal ecosystems or the long-term effects of management actions.

Lack of Capacity: It is possible that community members lack the resources, know-how, or abilities required to adopt and uphold sustainable management techniques.

Climate Change: The efficient management of coastal ecosystems may face difficulties due to climate change and other environmental variables, such as erosion and rising sea levels, which can make it harder for local populations to adjust to changing circumstances.

Overfishing: It may become more challenging for communities to maintain sustainable management practices when fish populations are depleted and coastal ecosystems are out of balance due to overfishing and unsustainable fishing methods.

Weak Enforcement of Regulations: Community-based management solutions may be jeopardised by lax enforcement of coastal management policies, such as those prohibiting pollution or illicit fishing.

Discussion of the Findings

The coastal communities of Ilaje in Ondo State, Nigeria, have a rich history of indigenous knowledge and practices related to coastal resource management. This knowledge has been shaped by their close interaction with the coastal environment and the need to sustainably manage the resources for their livelihoods. Studies have shown that the Ilaje people possess a deep understanding of their local ecosystems, including seasonal changes, tidal patterns, and the distribution of various resources such as fish, shellfish, and mangroves. This knowledge has enabled them to develop intricate and effective resource management strategies, such as the use of traditional fishing methods, seasonal harvesting practices, and community-based resource governance systems. However, the policies of coastal resource management in Ilaje communities have been influenced by various factors, including the introduction of

modern governance systems, the impact of climate change, and the encroachment of external actors such as oil companies and large-scale fishing operations. These factors have, in some cases, undermined the role of indigenous knowledge and practices in resource management, leading to conflicts and resource degradation.

Efforts have been made to incorporate indigenous knowledge into contemporary coastal resource management strategies, such as the establishment of community-based conservation initiates and the integration of traditional practices into local and regional development plans. These efforts have met with varying degrees of success, with some challenges remaining in reconciling traditional and modern governance systems and addressing the socio-economic and environmental pressures on the coastal communities. The indigenous knowledge and politics of coastal resource management in the Ilaje communities are complex and dynamic, shaped by a range of historical, cultural, and environmental factors. Understanding and incorporating this knowledge into contemporary resource management strategies is crucial for ensuring the sustainable use of coastal resources and promoting the resilience of these communities in the face of mounting challenges.

In light of the findings discussed here, several key implications emerged for the future of coastal resource management in Ilaje communities and similar contexts. Firstly, there is a need for increased recognition and integration of indigenous knowledge in policy-making and resource management practices. This can be achieved through active collaboration between local communities, researchers, and decision-makers, ensuring that indigenous perspectives are accurately represented and incorporated into management strategies. Furthermore, promoting the co-production of knowledge between indigenous and scientific communities can foster innovative solutions that combine traditional wisdom with modern scientific understanding. Secondly, addressing the socio-economic and political factors that undermine the role of indigenous knowledge in coastal resource management is crucial. This includes tackling issues such as resource conflicts, marginalisation of local communities, and the impacts of climate change and environmental degradation. By empowering local communities and strengthening their capacity to adapt to changing circumstances, the resilience of indigenous resource management systems can be enhanced.

Thirdly, promoting sustainable livelihood opportunities that are compatible with indigenous resource management practices is essential. This can involve supporting small-scale fishing and farming activities, eco-tourism initiatives, and other environment-friendly income-generating ventures. By diversifying local economies and reducing reliance on exploitative or unsustainable practices, the long-term well-being of coastal communities can be ensured. Lastly, continuous monitoring and evaluation of resource management strategies are necessary to assess their effectiveness and make adjustments as needed. This should involve the active participation of local communities, enabling them to share their experiences and insights and contribute to the ongoing refinement of management approaches. In conclusion, the lessons learned from studying indigenous knowledge and the politics of coastal resource management in the Ilaje communities can inform more inclusive and sustainable approaches to resource governance, not only in Nigeria but also in other coastal regions around the world. By recognising the value of indigenous knowledge and addressing the complex challenges faced by local communities, we can work towards a future where coastal resources are managed in a way that benefits both people and the environment.

Conclusion

For the Ilaje people, incorporating indigenous knowledge into community-based management plans has enormous potential to improve the resilience and sustainability of coastal ecosystems. Indigenous knowledge is a valuable source of information about regional ecosystems and sustainable resource use. By incorporating this knowledge into community-based management plans, issues such as overfishing, poverty, and climate change may be addressed. Nonetheless, there are other obstacles that must be overcome in order for indigenous knowledge to be successfully incorporated into community-based management plans. These include, but are not limited to, poverty, ignorance, incapacity, overfishing, climate change, and lax enforcement of laws. Howeve, a limited sample size of community members who participated in focus groups and interviews as part of the study may not have fully captured the range of experiences and practices within the communities.

Recommendations for Policy Implementation

The recommendations of the study are stated below for policy implementation:

1. Legal and legislative changes that facilitate the incorporation of indigenous knowledge into community-based management plans, such as the inclusion of traditional management techniques in coastal management laws and regulations, ought to be encouraged.
2. To guarantee that the particular requirements and viewpoints of the Ilaje communities are taken into consideration, collaborative management techniques that incorporate indigenous knowledge and western scientific knowledge are required for coastal management plans.
3. Adequate assistance should be provided for the transfer of technologies and management strategies from other coastal communities, as well as for the Ilaje villages to adapt and implement these strategies.
4. There is a need to improve the knowledge and abilities of community members in sustainable management practices, such as the use of traditional ecological knowledge and sustainable harvesting techniques, training and assistance.
5. Knowledge exchange will help to improve understanding and support for sustainable management techniques. This is necessary between community members and professionals, including ecologists, social scientists, and community development specialists.
6. There is a need for investment in traditional ecological knowledge to make sure that traditional ecological knowledge is retained and passed on to future generations and continues to influence sustainable management practices, it is imperative to make investments in its transmission and preservation within the Ilaje communities.
7. There should be community-based monitoring and evaluation management techniques and pinpoint areas in need of development. This process requires promoting the usage of community-based monitoring and evaluation for effectiveness.
8. To make sure that community-based management solutions are applicable and long-lasting, young people must be included in the process of incorporating indigenous knowledge for inter-generational engagement.

References

Agrawal, K.S. (2004). Politics, participation & sustainability in community-based natural resource management: Findings from a decade of research. *Annual review of Environment and Resources*, 29 (1): 537-565.

Anderson, J.M. (2001). *Indigenous knowledge and natural resource management in Africa: Case studies from Ghana and Cameroon. In indigenous knowledge and natural resource management: Capturing the complexity*, edited by P. de Leraars, A. Cassingena Harper, & K. Okali (Eds). Indigenous knowledge and natural resources management: Capturing the complexity (pp. 71-88). London: Earthscan.

Bulkeley, H., Edwards, G., & Castan B.V. (2019). Indigenous knowledge and climate change adaptation: Comparing ontologies of learning. *Environmental Science and Policy*, 89, 49-58.

Cox, M., Arnold, G., & Villamayor-Tomas, S. (2010). A review of design principles for community-based natural resource management. *Ecology and Society*, 15(4), 38.

Dietz, T., Ostrom, E., & Stern, PC. (2003). The struggle to govern the commons. *Science*, 302(5652), 1907-1912.

Harvey, O.E; Boyce, D.T, & Rutagarama. (2004). Sustainable development in renewable energy policy implementation. *Energy Policy*, 32 (18), 2041-2051.

Huss-Ashmore, R.; Sheekh, N. M.; Adan, I. S.; Jusuf, F.; Menkhaus, K.; Olad Hassan, A. (2018). Women in pastoral societies. *International Journal of African Historical Studies*, 26 (1), 149-165.

Iyase-Owolade, O. (2019). Traditional knowledge and sustainable development in Ilaje communities, Ondo State, Nigeria. *African Studies Quarterly*, 20 (2), pp. 222-244.

Martins, T.O; & Adefioye, O.A. (2010). Ilaje: *The precarious life of a coastal people Human geography*, 33 (1), pp. 17-35.

McLeod, S. (2018). Building resilience through community-based natural resource management. In S. McLeod (Ed.), community-based adaptation to climate change: Building resilience through local action (pp. 45-65). London, UK: Routledge.

Murphree, A.M. (2000). Community-based conservation: Old ways, New myths, and enduring challenges. *Conservation and Society*, 1 (1), 5-25, doi: 10.5751/es-00230-010105

Murphree, P. & Njoroge, L., (eds.) (2014). Community-based conservation in East Africa: A critical review, *African Journal of Wildlife Research, 44 (1), 54-65. Doi: 10.3957/056.044.0104*

Mwangi, E. & Cocks, J. (2013). Community-based conservation and local participation: An exploration of governance and ethics in Kenya. Ethics, Policy and Environment, 16 (3), 250-271. Doi:10.1080/21550085.2013.836535

Nnoli, O.O. (2003). Indigenous knowledge systems and sustainable development: Traditional fisheries and marine resource management in the Niger-Delta. *Internal Journal of Sustainable and World Ecology*, 10(4), 357-374.

Onyejekwe, I. (2008). From local knowledge to sustainable resource management: The politics of knowledge in a coastal village in Nigeria. *Geographical Journal*, Vol. 174, No. 2.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action.* Cambridge University Press.

Ostrom, E., Burger, J., Field, C. B., Norgaard, R.B., & Policansky, D. (1999). Revisiting the commons: Local lessons, global challenges. *Science*, 284(5412), 278-282.

Owino, M.A; & Khan, G.A. (2008). Factors influencing adoption of agroforestry practices by smallholder famers in Kakamega District, Kenya. *Journal of Agriculture and Rural Development in the Tropics and Subtropics (JARTS)*, 109 (1), 39-51. Doi: 10.17309/jarts.2008.39-51

Poteete, A.R., Jansen, M.A., & Ostrom, E. (2010). *Working together: Collective action, the commons, and multiple methods in practice.* Princeton University Press.

Porter, M.G. & Campbell, J.L. (eds.) (2014). Local communities and natural resource management: An evolving relationship?" *Journal of Environmental Management*, 141, 1-8. Doi: 10.1016/j.jenvman.2014.02.008

Sajikni, A.M. & Adams, B.A. (eds., 2005). Community participation in natural resource management in developing countries: A review of policy implications and effectiveness. *Journal of Sustainable Development in Africa*, 7 (2), 27-50.

Shanks, P. *& Ison, C.J. (eds.) (2011). Sustaining community-based natural resource management: Diverse approaches and perspectives.*

Schroon, M. & Ramakrishna, A. (2009). Community-based natural resource management: A review of theory, practice and policies. *Journal of Sustainable Development*, 2 (1), 81-96.

Urdaneta-Antolin, I. (2015). Indigenous knowledge and the governance of coastal resources: Insights from South Pacific Islands, *Marine Policy*, 52, 83-93. 10.5539/jsd.v2n1p81

Wanyeki, L.M, Mwaura, J.G., & Onyango, V.O. (2003). Community-based conservation of wildlife in Maasai Mara, Kenya. *African Journal of Ecology*, 41 (4), 278-286. Doi: 10.1046/j.1365-2028.2003.00402. x

Waylen, K.A., Blackstock, K.L., & Holstead, K.L. (2017). Challenges to enabling and implementing natural flood management: Insights from Scotland. *Journal of Flood Risk Management*, 10 (3), 285-296. Doi: 10.1111/jfr3.12259