

Fishing, Culture, and Economy: An Analysis of Ibeno's Artisanal Industry, Akwa Ibom State, Nigeria, 1900-2000

Ekaette Umanah Ekong* 

Department of History and International Studies, Faculty of Arts, University of Uyo, Nigeria

*Corresponding Author

Ekaette Umanah Ekong, Department of History and International Studies, Faculty of Arts, University of Uyo, Nigeria. ORCID: 0000-0002-5110-6484

Submitted: 2026, Mar 13 ; Accepted: 2026, Apr 04; Published: 2026, Apr 15

Citation: Ekong, E. U. (2026). Fishing, Culture, and Economy: An Analysis of Ibeno's Artisanal Industry, Akwa Ibom State, Nigeria, 1900-2000. *J Fish Fisheries*, 3(1), 01-06.

Abstract

This study examines the fishing industry in Ibeno Local Government Area of Akwa Ibom State, Nigeria, with emphasis on artisanal fishing as the dominant occupation. Drawing on oral interviews and secondary sources, the research explores the origin, migration, and settlement patterns of the Ibeno people, their fishing methods, implements, and supply chains. It highlights the socio-cultural institutions that shape fishing practices and the challenges posed by oil exploration, traditional methods, and limited mechanisation. The findings reveal that fishing remains central to the economy, culture, and identity of Ibeno, providing food security, employment, and trade opportunities despite environmental and technological constraints. The study underscores the need for government intervention and modernisation to sustain artisanal fishing and enhance its contribution to local, state and national development.

Keywords: Ibeno, Artisanal Fishing, Culture, Economy, Fishing Implements, Supply Chain, Niger Delta Fisheries, Coastal Livelihoods, Socio-Cultural Institutions, Environmental Degradation, Oil Exploration Impact, Fisheries Sustainability

1. Introduction

Fishing is one of the oldest occupations globally and the primary livelihood of the Ibeno people. Situated in the Niger Delta region, Ibeno is endowed with vast ocean resources that sustain artisanal fishing. Despite its economic importance, the industry faces persistent challenges, including environmental degradation from oil exploration, outdated fishing methods, and poverty among fisherfolks. This paper explores the historical, cultural, and economic dimensions of artisanal fishing in Ibeno, situating it within broader debates on sustainable livelihoods and resource management.

2. Literature Review

2.1 Global Perspectives on Fishing and Fisheries

Fishing has long been recognised as one of humanity's earliest occupations, providing food, trade, and cultural identity. Globally, the Food and Agriculture Organisation (FAO) defines the fishing industry as encompassing recreational, commercial, and subsistence fishing, as well as harvesting, processing, and

marketing. Scholars such as Idris, *et al* (2012) emphasise that fish contributes between 14-16% of the world's animal protein intake, serving as a primary source of nutrition for over one billion people [1]. This underscores the global importance of fisheries not only as a food source but also as a driver of economic development, employment, and cultural continuity.

Marine resources are often described as "treasures for current and future generations" (Gaonkar, Patil & Rodrigues, 2006). Beyond food, fisheries contribute to medicine, materials science, and biodiversity conservation. However, the sustainability of these resources has been questioned, particularly in regions where overfishing, pollution, and climate change threaten marine ecosystems.

2.2 African Context of Fisheries

In Africa, fishing is both a subsistence and commercial activity, deeply embedded in cultural traditions. Marr and Mortimer (1978) argue that fish is regarded as "good food" in African societies,

offering calorific value, protein, and fat-soluble vitamins [2]. Fishing practices vary across regions, influenced by geography, water bodies, and cultural norms. Khanna (1970) traces fishing methods back to prehistoric times. It noted that gears evolved differently across societies depending on available capital and ecological conditions.

African fisheries are often divided into freshwater and marine categories. Freshwater fisheries include rivers, lakes, and ponds, while marine fisheries encompass coastal lagoons, estuaries, and brackish waters. In Nigeria, both categories are present, but coastal communities such as Ibena rely heavily on marine fisheries.

2.3 Nigerian Fisheries and the Niger Delta Context

Nigeria's Niger Delta region is one of the most resource-rich areas in Africa, endowed with oil reserves and abundant marine life. However, oil exploration has significantly impacted fishing communities. Scholars such as Inyang (1980) and Moses (1983) highlight that traditional fishing methods dominate in the region, with preservation techniques such as smoking, salting, and drying being widely practiced [3,4].

The Niger Delta's fishing communities, including Ibena, face challenges of environmental degradation, declining fish stocks, and poverty. Oil spills, gas flaring, and industrial pollution have displaced fish populations and reduced yields. Despite these challenges, fishing remains central to livelihoods, cultural identity, and local economies.

2.4 Historical Accounts of Ibena Fishing

Several scholars have documented the fishing traditions of Ibena. Edet Udo (1983) describes Ibena villages as "typical fishing villages," where flotillas of canoes set out at dawn and return at dusk with catches [5]. Abasiattai (1991) emphasises the seasonal nature of fishing, with availability fluctuating according to tidal movements and flood periods [6]. Such fluctuations often led to migration, shaping the settlement patterns of fishing communities. Ukpong (2007) situates fishing within broader Ibibiyo cultural traditions, noting that riverine communities such as Ibena, Oron, and Ikot Abasi adapted their livelihoods to aquatic environments [7]. Fishing was not merely an occupation but a cultural practice, with children taught from birth to swim, paddle canoes, and predict weather conditions.

2.5 Fishing Implements and Techniques in Ibena

Traditional fishing implements in Ibena include *umum* (canoes), *ichine* (nets), *udeng* (paddles), and *nyuma* (baskets). Abasiattai (1991) notes that canoes, nets, harpoons, traps, and lines formed the principal means of fishing [6]. These implements reflect adaptation to local ecological conditions and cultural ingenuity.

Preservation methods are equally important. Moses (1983) and Shina (2011) emphasise that fish is highly perishable, requiring immediate preservation [4,8]. Techniques such as smoking, salting,

and drying are widespread in Ibena, ensuring that fish reaches consumers in usable condition. Poor preservation, however, reduces market value and discourages buyers.

2.6 Fishing Settlements in Akwa Ibom

Enyenihi (1994) identifies 26 fishing settlements in Ibena, making it one of the most prominent fishing communities in Akwa Ibom State [9]. These settlements target inshore pelagic and demersal stocks, including clupeids (bonga, sardines), shrimps, soles, croakers, barracuda, shark, and mackerel. Fishing settlements are not only economic hubs but also cultural spaces where traditions, institutions, and social norms are reinforced.

2.7 Socio-Cultural Dimensions of Fishing

Fishing in Ibena is intertwined with socio-cultural institutions such as the *Ekpuk* (lineage council), *Esop Idung* (village council), and *Obong Isong Idung* (clan head). These institutions regulate fishing practices, resolve disputes, and preserve traditions. Age-grade systems (*nka*) also play a role in organising labour and social responsibilities.

Fishing songs, dances, and rituals reflect the cultural significance of the occupation. The identity of Ibena is inseparable from fishing, making it both an economic and cultural lifeline.

2.8 Challenges in the Literature

While scholars have documented fishing practices, implements, and settlements, few have critically analysed the intersection of fishing with oil exploration, poverty, and modernisation. Existing literature often romanticises fishing traditions without addressing contemporary challenges. This study seeks to fill that gap by analysing artisanal fishing in Ibena within the context of environmental degradation, economic vulnerability, and cultural resilience.

3. Methodology

3.1 Research Design

This study adopts a historical-ethnographic design, combining qualitative methods with documentary analysis. The historical approach was necessary to trace the origins, migration, and settlement patterns of the Ibena people, while the ethnographic lens allowed for an in-depth understanding of their fishing practices, socio-cultural institutions, and economic activities. By integrating oral traditions with written sources, the research provides a holistic account of artisanal fishing in Ibena.

3.2 Study Area

The research was conducted in Ibena Local Government Area, Akwa Ibom State, Nigeria. Ibena lies within the Niger Delta mangrove belt, covering approximately 1,200 square kilometers and comprising 26 gazetted villages. Fishing settlements such as Upenekang, Mkpanak, Okoroutip, and Atabrikang were selected for fieldwork due to their prominence in artisanal fishing. The area is characterised by tidal movements, estuaries, and brackish

waters, which influence fishing practices and seasonal availability of species.

3.3 Sources of Data

Two categories of sources were employed:

3.3.1. Primary Sources: Oral interviews with fisher-folks, canoe owners, fishmongers, village heads, and elders.

Direct observation of fishing activities, implements, and preservation techniques, informal conversations with community members to capture cultural narratives and local terminologies.

3.3.2. Secondary Sources: Published books, journals, and pamphlets on Ibibio culture, fisheries, and Niger Delta studies. Government reports and surveys (e.g., Akwa Ibom State Ministry of Lands and Town Planning). Archival materials, including pamphlets such as this is Ibeno (1999).

3.4 Sampling Techniques

A purposive sampling method was adopted to identify key informants with deep knowledge of fishing practices and community history. Fisher-folk were selected across age grades (*Nka*) to capture generational perspectives. Village heads (*Obong Idung*) and lineage leaders (*Obong Ekpuk*) were interviewed to understand socio-political institutions. Fishmongers and canoe owners were included to provide insights into the supply chain and economic dimensions.

3.5 Data Collection Procedures

Fieldwork involved repeated visits to fishing settlements over several months. Interviews were conducted in the local dialect (Ibeno) and translated into English for analysis. Notes were taken during observations of fishing excursions, processing, and market activities. Photographs and sketches of implements such as *umum* (canoes), *ichine* (nets), and *nyuma* (baskets) were recorded to complement textual descriptions.

3.6 Analytical Framework

Data were analysed using thematic analysis, focusing on recurring themes such as:

- i. Historical migration and settlement patterns.
- ii. Fishing implements and techniques.
- iii. Socio-cultural institutions regulating fishing.
- iv. Economic contributions and supply chains.
- v. Challenges posed by oil exploration and modernisation.

The historical method was employed to synthesise oral traditions with documentary evidence, ensuring authenticity and contextual accuracy. Ethnographic insights were used to interpret cultural practices and terminologies.

3.7 Limitations of the Study

Several challenges were encountered:

- Informant Availability: Fisher-folk often had tight schedules, making it difficult to secure interviews.

- Fragmentary Information: Some informants provided incomplete accounts, requiring triangulation with other sources.

- Language Barriers: Certain terminologies in the Ibeno dialect required careful translation to avoid misinterpretation.

- Environmental Constraints: Oil exploration activities limited access to some fishing areas, affecting direct observation.

Despite these limitations, the combination of oral and written sources provided a robust foundation for analysis.

3.8 Ethical Considerations

Informed consent was obtained from all participants. Interviews were conducted respectfully, with sensitivity to cultural norms and traditions. Confidentiality was maintained, and participants were assured that their contributions would be used solely for academic purposes.

4. Results and Findings

4.1 Historical Origins and Migration of the Ibeno People

The Ibeno people trace their ancestry to migrations from Cameroon, specifically from the lineage of Mbre, whose second son Beno is said to have given rise to the name “Ibeno.” Oral traditions recount voyages in dug-out canoes along the Atlantic coast, with temporary settlements in Calabar and Andoni before the eventual establishment of primary villages such as Atabrikang, Ntafre, Opolom, Okoroutip, Iwoachang, Upenekang, and Mkpanak.

These migration narratives highlight resilience and adaptability. Storms, hostility from neighbouring groups, and ecological challenges shaped settlement patterns. The establishment of fishing villages was not random but strategically located near rivers, estuaries, and mangrove swamps to maximise fishing opportunities. Unlike many Ibibio villages named after individuals, Ibeno villages often derive names from environmental features- Mkpanak from mangrove trees, Okoroutip from the ‘utip’ plant, and Upenekang from the Ekang play.

4.2 Fishing Implements and Techniques in Ibeno

Fishing in Ibeno remains predominantly artisanal, relying on traditional implements passed down through generations. Key tools include:

- *Umum* (canoes): Locally carved wooden canoes, often paddled manually or fitted with small sails. Canoes are central to fishing excursions, enabling access to deeper waters.

- *Ichine* (nets): Varied nets designed for specific species. Gill nets, cast nets, and drag nets are commonly used.

- *Udeng* (paddles): Wooden paddles used to maneuver canoes.

- *Nyuma* (basket traps): Cone-shaped baskets with wide mouths, used to trap fish in shallow waters.

- *Usam* (spears): Employed in shallow waters or during communal fishing events.

- *Adutor* (drying baskets): Flat, rectangular baskets used to dry crayfish, shrimps, and small fish.

Fishing techniques include net casting, basket trapping, and spear fishing. Preservation methods are equally vital: smoking over open

fires, salting, and sun-drying ensure fish remains consumable and marketable. These methods reflect adaptation to the perishable nature of fish, as noted by Moses (1983) and Shina (2011) [4,8].

4.3 Fishing Settlements and Supply Chains

Ibendo hosts 26 fishing settlements, making it one of the largest artisanal fishing hubs in Akwa Ibom State. Settlements such as Esuk Upenekang, Mkpanak, and Okoroutip serve as centers of production and distribution. Fish supply chains typically follow this trajectory:

- **Harvesting:** Fisher-folks catch fish using canoes and nets.
- **Processing:** Fish is smoked, salted, or dried in settlements.
- **Distribution:** Fishmongers transport products to local markets and neighbouring states.
- **Consumption:** Fish is sold fresh or preserved, contributing to food security.

Species harvested include clupeids (bonga, sardines), shrimps, croakers, barracuda, shark, and mackerel. Seasonal variations influence availability, with tidal movements dictating fishing schedules.

4.4 Socio-Cultural Institutions and Fishing

Fishing is not merely an occupation but a cultural identity. Institutions such as the *Ekpuk* (lineage council), *Esop Idung* (village council), and *Obong Isong Idung* (clan head) regulate fishing practices, resolve disputes, and preserve traditions. Age-grade systems (*nka*) organise labour, with younger members assisting in paddling and net casting, while elders oversee decision-making.

Fishing songs, dances, and rituals accompany excursions, reinforcing communal bonds. Terminologies such as *achak* (fish), *eso umum* (canoe head), and *udommung* (water tester) reflect the linguistic richness of fishing culture.

4.5 Economic Contributions

Fishing sustains livelihoods in Ibendo, providing employment, food security, and trade opportunities. Fishmongers sell dried fish in local markets, while supply chains extend to neighbouring states such as Cross River and Rivers. Fishing also supports subsidiary occupations, including canoe carving, net weaving, and salt-making.

Despite oil exploration, fishing remains the backbone of Ibendo's economy. Interviews with fisher-folk revealed that "without fishing, there is no Ibendo," underscoring its centrality to identity and survival.

4.6 Challenges Facing the Fishing Industry

The study identified several challenges:

- **Oil Exploration:** Activities by multinational companies, particularly ExxonMobil, presently Seplat Oil, displaced fish populations, and reduced yields. Fisher-folk lament that "oil drives fish away," forcing them to travel farther for catches.
- **Traditional Methods:** Reliance on canoes and manual nets

limits productivity compared to mechanised fishing.

- **Poverty:** Low yields and fluctuating market prices keep many fisher-folk at subsistence levels.
- **Infrastructure Deficits:** Lack of cold storage, modern preservation facilities, and mechanised boats hampers expansion.
- **Environmental Degradation:** Mangrove deforestation and coastal erosion threaten habitats.
- **Policy Gaps:** Limited government intervention and inadequate support programs leave fisher-folk vulnerable.

4.7 Resilience and Adaptation

Despite these challenges, Ibendo fisher-folk demonstrate resilience. They adapt by migrating seasonally, diversifying preservation methods, and relying on communal institutions for support. Cultural traditions reinforce solidarity, ensuring that fishing remains a viable occupation even under adverse conditions.

5. Discussion

5.1 Fishing as Cultural Identity

The findings confirm that fishing in Ibendo is not merely an economic activity but a cultural identity. From oral traditions of migration to the linguistic richness of fishing terminologies, fishing is woven into the social fabric of the community. Institutions such as the *Ekpuk* (lineage council) and *Esop Idung* (village council) regulate fishing practices, reinforcing communal bonds. This aligns with Udo's (1983) observation that children in riverine Ibido communities are taught swimming, canoe paddling, and weather prediction from birth [5]. Fishing thus functions as a rite of passage and a marker of belonging.

5.2 Artisanal Fishing and Economic Sustainability

Artisanal fishing sustains livelihoods in Ibendo, providing food security and employment. However, reliance on traditional implements such as canoes and basket traps limits productivity. Compared to mechanised fishing, artisanal methods yield smaller catches and restrict access to deeper waters. Yet, artisanal fishing remains resilient, adapting to ecological realities and sustaining local economies. This paradox highlights the tension between tradition and modernisation.

Globally, artisanal fisheries are recognised for their role in poverty alleviation and food security, particularly in developing countries. FAO reports emphasised that small-scale fisheries employ millions worldwide, often in marginalised communities. In Ibendo, artisanal fishing fulfills similar roles, but without adequate government support, fisher-folk remain vulnerable to poverty and market fluctuations.

5.3 Environmental Challenges and Oil Exploration

One of the most pressing challenges identified is environmental degradation from oil exploration. ExxonMobil and other companies operating in the Niger Delta have polluted waters, displaced fish populations, and disrupted ecosystems. Fisher-folk repeatedly lamented that "oil drives fish away," forcing them to

travel farther and expend more resources. This finding resonates with broader critiques of extractive industries in the Niger Delta, where oil wealth coexists with local impoverishment.

Environmental degradation undermines both economic sustainability and cultural identity. Mangrove deforestation, coastal erosion, and pollution threaten habitats central to fishing traditions. Without intervention, artisanal fishing risks decline, eroding cultural heritage and livelihoods.

5.4 Preservation and Supply Chain Limitations

Fish is highly perishable, requiring immediate preservation. Traditional methods such as smoking, salting, and drying remain widespread in Ibeno. While effective, these methods limit market expansion, as preserved fish often fetch lower prices compared to fresh or frozen products. Lack of cold storage and mechanised preservation facilities hampers competitiveness.

Shina (2011) emphasised that poorly preserved fish loses market value, discouraging buyers [8]. In Ibeno, fisher-folk face similar challenges, with inconsistent quality affecting consumer loyalty. Modern preservation infrastructure could enhance marketability, but requires government investment and training.

5.5 Socio-Political Institutions and Resilience

Despite challenges, socio-political institutions reinforce resilience. Councils such as *Esop Ekpuk* and *Esop Idung* resolve disputes, regulate fishing practices, and preserve traditions. Age-grade systems (*nka*) organise labour, ensuring continuity across generations. These institutions embody cultural resilience, enabling adaptation to ecological and economic pressures.

Fishing songs, dances, and rituals further reinforce identity, transforming fishing into a communal experience. Such cultural practices sustain morale and solidarity, even under adverse conditions. This resilience underscores the importance of integrating cultural institutions into modernisation efforts, ensuring that development does not erode traditions.

5.6 Comparative Perspectives

Comparing Ibeno to other Niger Delta communities reveals similarities and differences. Like Oron and Ikot Abasi, Ibeno relies heavily on artisanal fishing, with similar implements and preservation methods. However, Ibeno's scale—with 26 fishing settlements—makes it one of the largest artisanal hubs in Akwa Ibom State. This scale amplifies both opportunities and challenges, positioning Ibeno as a critical case study for sustainable fisheries in Nigeria.

Globally, small-scale fisheries face similar challenges of modernisation, environmental degradation, and market limitations. Studies in Asia and Latin America highlight the vulnerability of artisanal fisher-folk to poverty and marginalisation. Ibeno's experience thus resonates with broader debates, situating local challenges within global contexts.

5.7 Policy Implications

The findings underscore the need for government intervention. Policies should address

- Environmental Protection: Stricter regulation of oil exploration to mitigate pollution and habitat destruction.
- Modernisation: Investment in mechanised boats, cold storage, and preservation facilities.
- Training: Capacity-building programs to empower fisher-folk with modern techniques.
- Market Expansion: Infrastructure was built to connect Ibeno's fish supply chains to national and international markets.
- Cultural Preservation: Integration of socio-political institutions into development programs, ensuring modernisation respects traditions.

Without such interventions, artisanal fishing risks decline, undermining both economic sustainability and cultural heritage.

5.8 The Paradox of Tradition and Modernisation

The central paradox is that tradition sustains identity but limits productivity, while modernisation enhances productivity but risks eroding identity. Balancing these forces is critical. Modernisation should be culturally sensitive, integrating traditional institutions and practices into development programs. For instance, councils could oversee mechanisation initiatives, ensuring community ownership and cultural continuity.

This balance reflects broader debates in development studies, where modernisation often clashes with tradition. Ibeno's case illustrates that sustainable development requires integration, not replacement, of cultural practices.

6. Conclusion and Recommendations

6.1 Conclusion

This study has examined the fishing industry in Ibeno Local Government Area, with emphasis on artisanal fishing as the dominant occupation. Through oral interviews, observations, and secondary sources, the research traced the historical migration of the Ibeno people, their settlement patterns, and the centrality of fishing to their cultural identity and economic survival.

The findings reveal that fishing in Ibeno is more than an occupation; it is a way of life. It shapes social institutions, cultural practices, and economic activities. Implements such as *umum* (canoes), *ichine* (nets), and *nyuma* (basket traps) reflect adaptation to ecological realities, while preservation methods such as smoking and salting ensure food security and marketability. Fishing settlements serve as hubs of production and distribution, sustaining livelihoods and connecting Ibeno to broader trade networks.

Yet, the industry faces significant challenges. Oil exploration has polluted waters, displaced fish populations, and undermined productivity. Reliance on traditional methods limits competitiveness, while poverty persists among fisherfolk.

Infrastructure deficits, environmental degradation, and policy gaps exacerbate vulnerability. Despite these challenges, socio-political institutions and cultural traditions reinforce resilience, enabling adaptation and continuity.

The central paradox is that tradition sustains identity but limits productivity, while modernisation enhances productivity but risks eroding identity. Sustainable development in Ibeno requires balancing these forces, integrating cultural institutions into modernisation efforts, and ensuring that development respects traditions.

6.2 Recommendations

6.2.1 Government Intervention

- **Environmental Regulation:** Stricter enforcement of environmental laws to mitigate pollution from oil exploration. Compensation schemes should be established for communities affected by oil spills and habitat destruction.
- **Infrastructure Development:** Investment in cold storage facilities, mechanised boats, and modern preservation technologies to enhance productivity and market competitiveness.
- **Training and Capacity Building:** Programs to empower fisherfolk with modern techniques, while integrating traditional knowledge to ensure cultural continuity.

6.2.2 Community Empowerment

- **Strengthening Institutions:** Councils such as Esop Ekpuk and Esop Idung should be integrated into development programs, ensuring community ownership and participation.
- **Youth Engagement:** Age-grade systems Nka should be leveraged to involve youth in modernisation initiatives, ensuring generational continuity.
- **Cultural Preservation:** Fishing songs, dances, and rituals should be documented and promoted as part of cultural heritage, reinforcing identity alongside modernisation.

6.2.3 Economic Diversification

- **Market Expansion:** Infrastructure should connect Ibeno's fish supply chains to national and international markets, enhancing income and reducing poverty.
- **Subsidiary Occupations:** Canoe carving, net weaving and salt-making should be supported as complementary industries, diversifying income sources.
- **Cooperative Societies:** Fisher-folk should be encouraged to form cooperatives, enabling collective bargaining, access to credit, and market leverage.

6.2.4 Academic and Policy Research

- **Further Studies:** Scholars should conduct comparative studies of artisanal fishing across Niger Delta communities, identifying

best practices and challenges.

- **Policy Integration:** Research findings should inform state and national policies on fisheries, ensuring that artisanal fishing is recognised and supported.

- **Sustainability Frameworks:** Studies should explore integration of traditional institutions into sustainability frameworks, balancing modernisation with cultural preservation.

6.3 Final Reflections

Fishing in Ibeno embodies resilience, adaptation, and identity. Despite environmental degradation and economic vulnerability, fisher-folk sustain livelihoods through traditional practices and cultural institutions. Modernisation offers opportunities but must be pursued with sensitivity to traditions. Government intervention, community empowerment, and academic research are critical to sustaining artisanal fishing and enhancing its contribution to local and state development.

Ultimately, the future of Ibeno's fishing industry depends on balancing tradition and modernisation, ensuring that development enhances productivity without eroding identity. Fishing must remain not only an economic lifeline but also a cultural heritage, sustaining both livelihoods and identity for generations to come.

References

1. Idris, S, Farida, S, and Nasir, MA (2012), Status Survey of Artisanal Fisheries in Hadeija Emirate, Jigawa state, Nigeria In: Proceedings of the 27th Annual Conference and Biennial General Meeting of the Fisheries Society of Nigeria.
2. Mortimer L. and Marr. A (1978), *Fish Culture in Africa*, London: Harper and Row Limited.
3. Inyang, P. E. B. (1980). Calabar Environs: Geographical Studies. University of Calabar Press, Nigeria
4. Moses, BS. (1992). Introduction to Tropical Fisheries. Ibadan: University Press.
5. Udo, E. A. (1983). Who are the Ibibio? onitsha. *Africana-Fep publishers Ltd.*
6. Abasiattai, M. (1991). The Ibibio: An Introduction to the Land, the people and their culture. *Alphonsus Akpan, Calabar, Nigeria.*
7. Ukpong, E. A. (2007). *An enquiry into culture: Ibibio names.* Dorand publishers.
8. Shina, P. (2011), *Fish Processing and Preservation.* New Delhi: APH Publishing.
9. Enyenihi, UK. (1994). "The Fishery Resource." In: S. W. Peters, Edet R. Iwok and Okon E. Uya (Eds.), *Akwa Ibom State: The Land of Promise, A Compendium.* Lagos: Gabumo Publishing Company Limited.

Copyright: ©2026 Ekaette Umanah Ekong. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.