

Competing Fisheries Stakeholders: User Rights in Nigeria's Coastal and Inland Fishing Communities

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Abstract

Governance of tenure and fishing rights are critical to food security, poverty alleviation, livelihoods sustenance and sustainable utilization of fishery resources for small-scale fisheries, particularly in developing countries. In Nigeria, there is a paucity of literature or studies on tenure, fishing rights and management rights of the small-scale fisheries. Hence, this paper presents a situational analysis of the artisanal (small-scale) inland and coastal fisheries in Nigeria with respect to tenure and user rights, which are tangential to achieving 2030 UN Sustainable Development Goals. The research methodology adopted involved collection of primary data from surveys with the FAO Tenure and User rights Questionnaire, secondary data from reviewed literature, and over three decades of authors' cumulative knowledge and engagement in small-scale fisheries. The small-scale fisheries are heterogeneous, multi-species and multi-gear characterized on the basis of the environment and crafts. They contribute over 70 percent to total domestic fish production. Statutorily, governance assumes a hierarchical approach, with legislations for the inland and coastal small-scale fisheries within the purview of the State and Federal Governments, respectively. However, the governance structure of small-scale fisheries inclusive of tenure and user rights exists formally (State), informally (tradition), and through fishers cooperatives/organizations/institutions. Most inland fisheries are under communal property regimes, and access to resources (fishing rights) specified mostly by fishing gear while the small-scale fishery operating in the coastal waters has statutory (formal/legal and recognized) and exclusive fishing rights to fishery resources within first five nautical miles in the coastal waters. Nigerian women fisherfolks are excluded from fishing in deep waters but they hold fishing rights in the nearshore waters, creeks, rivers, mangrove swamps where they own and harvest mainly small crustaceans, molluscs and fish, less frequently, using passive gears, gleaning and nonmotorized crafts. Extra-sectoral interactions and hazardous events that pose challenges to tenure and fishing rights are excluded in extant fishery policies and management, and hence need to be addressed.

Keywords: Tenure, User rights, Human right, Right to food, Gender, indigenous peoples, youths, fishing, local and global issues.

1. INTRODUCTION

1.1 Description of the Fishery

Artisanal fishery is the largest form of fishing carried out by the small-scale fisheries (SSFs) both in the maritime fishing communities on Nigeria's southern coastline as well as in the brackish water, coastal streams and lagoons in the Inland freshwater fisheries in the lakes, dams, rivers and tributaries.

The SSFs are heterogeneous, multi-species and multi-gear and characterized on the basis of the environment and crafts. They contribute over 70 percent to total domestic fish production. The geographical area where harvesting activities for this Fishery take place is the coastal areas less than three nautical miles from the shore, as well as in the coastal areas between three and five nautical miles from the shore by fishers using canoes. These artisanal fishers also harvest fish from inland, freshwater ecosystems.

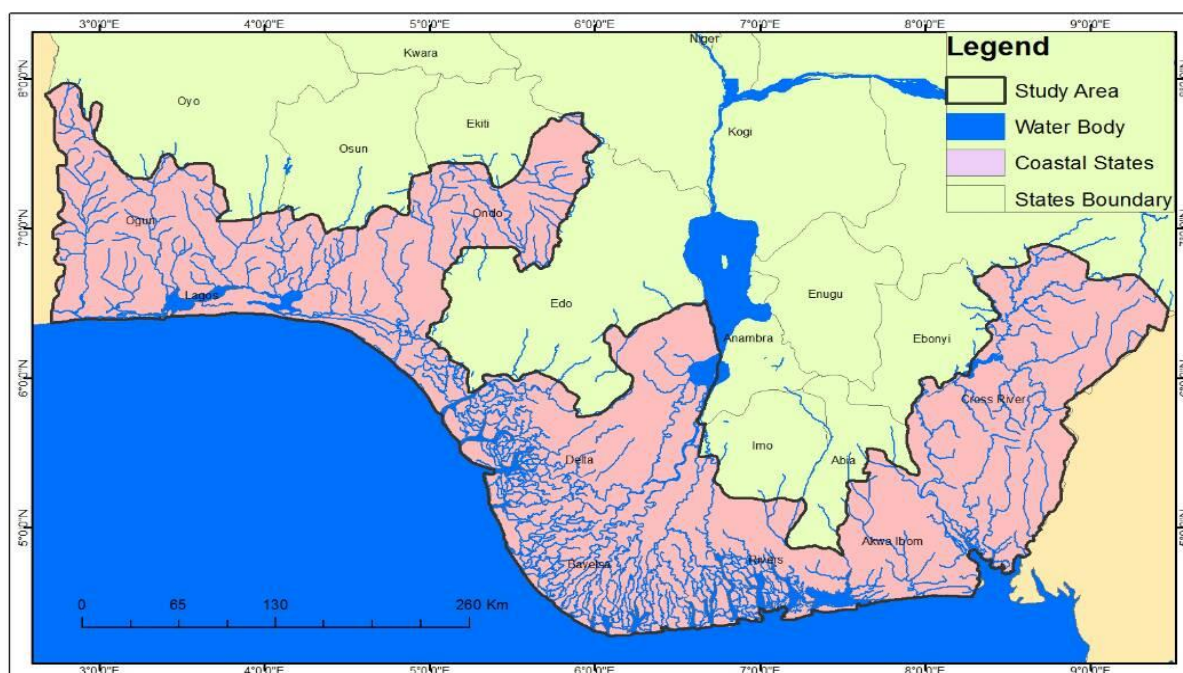


Figure 1. Figure 1. Demographic Map of Nigeria showing its southern coastline from Lagos (west) all the way to Cross River (south-east). Also the Inland waterways within the country.

Source: US Geological Survey, 2018.

One unique aspect of the artisanal fisheries ecosystem in Nigeria is that both men and women are fishers, especially the 'Aworis' in Lagos and Ogun States. Also, the 'Ijaws and Ilajes' in Ondo State while in the Niger Delta there are other ethnic groups – 'Urhobos', 'Adonis', 'Efik' 'Ibibios' where both men and women fish. The women and children fish close to the shore,¹ in rivers, creeks, lagoons, estuaries, lakes, and mangrove. They use their canoes and oars to move around the fishing grounds and Swamps, while the men fish far into the deep waters in rivers, lakes, lagoons and the sea.

Table 1. Most important species of fish caught by Artisanal Fishers in Nigeria.

Common Name	Scientific Name	Fishing Season
Croaker ^b	Pseudotolithus spp.	All year
Bongafish ^b	Ethmalosa fimbriata	November to April
Catfish ^a	Chrysichthys nigrodigitatus, Clarias gariepinus	All year
Tilapia ^a	Oreochromis aurea, Oreochromis niloticus Tilapia guineensis,	All year

¹ Source: Mafimisebiet al., 2016; Williams, 1987; Williams, 1994; Williams 2001 c; Williams and Adedoyin, 2002; Williams et al, 2006

	Coptodon zilli	
Periwinkles, oysters and clams ^a		All year
Bony Tongue	Heterotis niloticus	All year
Land Crab ^a		November to April
Blue Swimming Crab ^{ab}	Callinectes amnicola	November to April
Sole ^b	Cynoglossus spp.	All year
Grunter ^b	Pomadasys spp.	All year
Grouper ^b	Epinephelus spp.	All year
Shiny nose ^b	Polydactylus spp.	All year
Red snapper ^b	Lutjanus spp.	All year
Barracuda ^b	Sphyraena spp.	All year
Mullet ^a	Mugil spp.	All year
Threadfin ^b	Galeoides spp.	All year
		^a are fish species from inland waters including estuaries, lagoons, rivers, lakes, creeks, mangroves swamps etc. ^b are fish species from small-scale coastal fishery

Table 2. Overall status of fish species.

Mangrove swamp crab	Blue Crab	Periwinkle	Crayfish	Catfish	Bonga fish
Fully exploited	Fully exploited	Fully exploited	Fully exploited	Fully exploited	Fully exploited

1.2 Economic contribution and social implications of the fishing activity

According to the Nigerian Fisheries Data (2008-2015), the average employment in the primary sector is unsegregated by gender; however, the average employment by secondary sector is segregated by gender which shows Male 8.18 million (29%) and Female 20.02 million (71%). From our research work with the women who are unreported to participate in the primary employment of the artisanal fishery, we would say that on the average if 8.62 million (85%) of participants are males, 1.5 million are female (15%).

This information results in the following:

- Primary participation in artisanal fishery Male: 85%; Female 15%
- Secondary participation in artisanal fishery Male 29%; Female 71%

Primarily, artisanal fishery catches are strictly for domestic food consumption, however, with more and more members of the society investing in fish farming activities, there is a need for some of the products to be diverted into the non-human consumption such as fish meal. For example, juvenile Clupeids and juvenile shrimps are the most feasible artisanal fishery products that fishers could sell for such an enterprise.

Indeed, most of the artisanal fishery products are either cured, smoke-dried or salted to preserve them from spoilage. Even with these techniques, artisanal fishery post-harvest losses are very high in Nigeria. To reduce poverty and zero hunger while enhancing gender equity (by reducing gender inequality within the society), meanwhile ensuring responsible consumption and production of fishery products, is one of the strategies for achieving the United Nations Sustainable Development Goals (SDGs).

2. MANAGEMENT OF THE FISHERY AND RIGHTS-BASED APPROACHES

2.1 Management of the Fishery

While there were two parallel governing systems, the traditional (customary) and the modern (state) systems, the former has remained the most popular, effective, and successful (A form of meta-governance of fisheries exists in Nigeria whereby according to Schedule II Part I, Item 29, of the 1999 Constitution (Nigeria Constitution 1999), all issues relating to inland SSFs are within the purview of the state government to legislate on.

Village level institutions have as their major goals the enhancement of social capital (e.g. reciprocal activity and assistance to the needy). Such organizations operate through long-standing customary rules/laws, norms and taboos. In addition, Village Heads or Sarkin Ruwas (Head Fishermen), and Bulamas (Water Chiefs) usually preside and exercise some level of regulatory power with respect to fishery access. They act as links between the rural community and village level formal institutions such as the local representative of the Federal Department of Fisheries (if present). They have no firm advocacy/lobbying powers at the national (macro) or middle (meso) levels but are vital at the local government levels, where they are able to influence access to the fisheries. This is most common in major fishing communities of Kainji/Jebba and Chad basins, the confluence of the Niger/Benue, and Nguru–Gashua Wetlands, North-East Nigeria.

In Lagos State, fishers are organized into State-registered cooperatives and, through collective action, are able to wield some influence over resource management. Most inland fisheries are under communal property regimes and access to resources (fishing rights) that are specified mostly by fishing gear, while the SSF operating in the coastal waters has statutory (formal/legal and recognized) and exclusive fishing rights to fishery resources within first 5 nautical miles in the coastal waters.

Nigerian women fisherfolks are excluded from fishing in deep waters but hold fishing rights in the nearshore waters, creeks, rivers, and mangrove swamps where they own and harvest mainly small crustaceans, molluscs and less frequently fish using passive gears, gleaning and un-motorized crafts. Extra-sectoral interactions and hazardous events which pose challenges to tenure and fishing rights are excluded in extant fisheries policies and management, and hence need to be addressed.

2.2 Brief history of former rights-based approaches used in the Fishery

Most fisheries tend to be open-access but limited by community ownership regimes. In many inland fisheries, boundaries are ill-defined as are the boundaries for the resources which move freely. However, the fishing area of a community is delimited by the extent of fishing grounds allotted to the fishers. Fishing areas exist but are not strictly adhered to by fishing participants.

2.3 Rights-based approach: allocation and characteristics

In an open-access regime, there are obviously no allocations. The SSF has exclusive fishing rights to fishery resources within the first five nautical miles in the coastal waters, but there is some invasion by industrial trawlers in this exclusive zone.

Extra-sectoral interactions and hazardous events (in detail described in chapter 4.1) which pose challenges to tenure and fishing rights are excluded in existing fisheries policies and management, and hence need to be addressed.

3. CONTRIBUTION OF THE RIGHTS-BASED APPROACH TO ACHIEVING SUSTAINABILITY

3.1 Sustainable use of the resources

Only sporadic stock assessments on the fishery resource in Nigeria have been carried out by individual researchers, especially PhD candidates. However, for most indigenous fishing communities, no stock assessment of the Fishery is undertaken. A few biologists with research grants carry out a limited form of stock assessment of various water bodies in Nigeria.

Generally, with many of these ecosystems where artisanal small-scale fishery is practiced, there has not been a stock assessment of most of the species listed in Table 2, because of their limited economic value compared to those listed in Table 1, such as croaker, sole, grunter, grouper, shiny nose, and red snapper, which have higher economic value in the export market/trade.

3.2 Economic viability of the Fishery

The number of fishers in the Fishery has not changed. However, over the last ten years, the fishers have aged and become poorer because the fish caught are smaller in size and there are fewer younger fishers joining them to fish.

The distance travelled during an average fishing trip has not changed either. However, they encroach on each other's fishing grounds compared to the past ten years following the fish stocks. The economic situation is causing them to compete more vigorously. They spy on one another in an effort to ensure they harvest as much of the available fish stock as possible.

3.3 Social equality

Women are allowed to own fishing gear and fishing boats. Their participation in the fisheries is quite high, with 15 percent in the primary sector. As in all other West African countries, the post-harvest sector is mainly in the hand of women, with 71 percent. The role of artisanal fishers is well recognized by the government; in fact, five miles are assured for this fishery sector. Fishers generally are carrying out day trips.

The fishers from Nigeria travel to access this Fishery, for example, the Ilaje fishers from Ondo State travel to Lagos Island, the Urhobos from Edo and Delta State travel to Borno State to access the Fishery in the lakes and dams, and the Tivs from Benue travel to the Lake Chad to access the fishery in the Lake. Some fishers from Benin Republic travel to Badagry for access too. There are Ghanaian fishers, using what are known as Ghanaian Boats to fish especially with purse seine for bonga in Akwalbom and Cross River States. There are also Ijaws, Igbos and Yorubas in the area as fishers, fish traders and/or suppliers fishing equipment. Migratory fishers lead to problems with the local resident fishers.

4. MAIN CHALLENGES AND WAY FORWARD

4.1 Challenges for the Fishery

The main challenges for the artisanal fishery come from competition between fishing communities and seasonally migrant fishers. There is an influx of migrant fishers and increased fishing effort, but weakened social capital and social norms. This conflicts may increase non-compliance.

Conflicts between local small-scale fishers and industrial fishers represent the main challenge for small-scale fishers. The illegal fishing by fishing trawlers is a major problem for the small-scale fishers. The regularity of trawler incursions into the non-trawling zone of five nautical miles has exacerbated the call for increased use of the monitoring, control and surveillance (MCS) systems in small-scale fishing zones².

In addition, there exist conflicts between fishers with fishing gear targeting the same species. The fishing grounds for most artisanal fishers are the same. With a decreased catch in species like catfish and croaker, which is probably due to effects of climate changes, there are arguments between the fishers and suggestions for the fishers not to fish very close to each other. Each fisher tends to lay claim on a certain location or region of the area for him or herself.

Also important are the conflicts between fishing communities and Oil Producing Companies. Oil Platforms are installed on traditional fishing grounds, and fish are denied access. Oil spills destroy fishing gears and pollute the water and fish; this constitutes an economic loss. In the case of oil and natural gas extraction, in the Niger Delta, the conflict between the oil and gas industry has generated political bad blood to the extent that armed personnel have been invited to control the environment. Legal cases have been taken to The Hague and compensations have been paid to various groups by either the Government (in the case of SaroWiwa who was killed by the Abacha Government) or Shell Petroleum, which has had to pay Community Leaders compensation for various reasons including pollution of the ecosystem. Women were also involved in protesting that their husbands could not go fishing, and this has affected their livelihoods.

An important challenge for the inland fishery is represented by agriculture activities (Fertilizer- run-offs from farm pollutes inland waters causing eutrophication, nuisance algal bloom). With agriculture, the need for physical reward from employment is the reason for the conflicts. When fishing is not as lucrative as it was in the past, young members of the population hire themselves out to farmers who pay them regularly for the job performed.

In the case of sand mining, the need for sharp sand for construction is competing for labour just like the agriculture; hence, the young members of the population want a job that will pay for their services. Besides, sand mining and dredging are destructive to fishing. The sound generated from the equipment drives fish further away. The miners are also known to destroy fishers' nets and other gears. They are alleged to mine around, in the fishing grounds and spawning areas.³

This year, the issue of plastic pollution was well demonstrated as an environmental issue, and there was extensive educational mitigation in all the Maritime States to inform the inhabitants how and what the plastic pollution is all about and show the impact on the Ocean – vis-à-vis SDG 14.

4.2 Improving fishery sustainability in the future

The customary fishing rights are recognized but informal because they are not statutory or legal. As far as one knows there is no mention of fishing rights for inland fisheries. However, fishing rights existing for the SSF operate within the five nautical miles of the coastal waters. The same is operational in the inland area, but under the jurisdiction of SarkinRuwa and Bulamas (Water Chiefs) in consultation with the Village Chiefs and Ruling Chief as, for example, in Argungu, where the Royal (Emir) is recognized.

Intra-fishing conflicts are resolved largely within traditional fishing resolution mechanisms, in which case fish leaders intervene and find solutions and spirituality. For conflicts with other stakeholders such as sand miners and industrial fisheries, fishers resort to the Government. While the former has been effective, conflict resolution outside the Fishery has not been entirely successful.

² Source: Akintola et al., 2017

³ Source: Akintola and Fakoya 2016

There are a number of NGOs working with and within communities all over Nigeria to resolve conflict even within the small-scale fishing communities. The NGOs have been very effective.

1. LESSONS LEARNED

There are several lessons that are learned from this experience:

- Even when the customary rights are recognized, like in the case of the artisanal fishery in Nigeria, illegal fisheries by industrial fisheries can invade the allocated zones, if there is no MCS. Both State and Federal MCS units are constrained by inadequate logistics and human resources. Most of the fishing settlements along the coastline and littoral zones of inland waters are poorly accessible due to poor or non-existent access roads and susceptibility to flooding during the rainy seasons.
- New economic activities such as oil exploitation and sand mining impact the artisanal fishery. When competing with these strong competitors, the artisanal sector loses out, as economic interests are on the side of the competitors.
- Inland fisheries are less visible. MCS is even less effective in the inland fisheries sector. Agriculture impacts severely the performance of inland fisheries, which are generally losing out. More visibility of the role of the inland fisheries sector with regard to food security is needed in national policy discussion.

REFERENCES

- Akintola, S.L. and Fakoya, A.** (2016). Governance and Social-Institutional Arrangement of Small-Scale Fisheries and Relationship with Non-Fishery Users in Badagry Creek, Lagos State, Nigeria. In *Inter-Sectorial Governance of Inland Fisheries*. Retrieved from eBook. Available: <http://toobigtoignore.net/wp-content/uploads/2016/08/final-Akintola-and-Fakoya.pdf>
- Akintola, S.H., and Fakoya, K.A.** (2017). Small-scale fisheries in context of traditional post-harvest practice and the quest for food and nutritional security in Nigeria. *Agriculture & Food Security*, 6(1), 34.
- Akintola, S.L., Fakoya, K.A., and Joseph, O.O.** (2017). Applying the Small-Scale Fisheries Guidelines in Nigeria: Status and Strategies for Badagry Coastal and Creek Fisheries. In S. Jentoft, R. Chuenpagdee, M.J. Barragán-Paladines, and n. Franz (eds.) *The Small-Scale Fisheries Guidelines: Global Implementation*. MARE Publication Series 14. Springer, pp.635-656.
- Pascual, J., Frangoudessa K., and Williams S.** (2005d). Local Institutions. In J. Kooiman, M. Bavinck, S. Jentoff and R. Pullin (eds.) *Fish For Life – Interactive Governance for Fisheries*. Centre for Maritime Research (MARE) Publication Series No. 3. Amsterdam: Amsterdam University Press. 153-172 pp.
- Kolawole, O.D., Williams, S.B., and Awujola, A.F.** (2010). Indigenous fish processing and preservation practices amongst women in South-western Nigeria. *Indian Journal of Traditional Knowledge*, 9(4), 668-672.
- Ababouch, L., and Caralu, C.** (2015) Fisheries and Aquaculture in Context of Blue Economy. UN Economic Commission for Africa. Feeding Africa, 21-23 October, 2015.
- Welcome, R. L.** (1972). CIFA TECH. PAP. 1:117PP.
- Williams, S., and Nauen, C.E.** (1998a). Fisheries Economics and trade in West African region: A gender perspective. *The Journal of West African Fisheries*, 7, 321-334
- Williams, S., and Awoyomi, B.** (1998b). Fish as a Prime Mover of the Economic life of Women in a Fishing Community. In *Proceedings of the 6th IIFET Conference*, Tromso, Norway (286-292).
- Williams, M. J., Williams, S.B. and Choo, P.S.** (2001b). From Women in Fisheries to Gender and Fisheries. In Williams, et al. (Eds.) *Global Symposium on Women in Fisheries Sixth Asian Fisheries Forum*. 29 November 2001, Kaosiung, Taiwan (13-20).

Williams, S.B., Hochet-Kibongui A.M., and Nauen C.E. (2005a). *Gender, fisheries and aquaculture: Social capital and knowledge for the transition towards sustainable use of aquatic ecosystem*. Retrieved from http://cordis.europa.eu/pub/inco/doc/genderfishaquac050627_en.pdf

Williams, S.B., Dada, B. F., Shimang, G.N. and Williams, O.O. (2006). Fishing: What has HIV/AIDS Got to do with it?. In P.S. Choo, S.J. Hall and M.J. Williams (Eds.) *Global Symposium on Gender and Fisheries*. Seventh Asian Fisheries Forum, 1-2 December 2004, Penang, Malaysia (51-58). Penang: The World Fish Center. Retrieved from www.worldfishcenter.org.