

Sources and Resolution of Conflicts in Nigerian Artisanal Fisheries

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The increasing dependence on fisheries as a source of livelihood in the maritime states of Nigeria has been associated with intensive management of available resources and an upsurge of contestation of ownership and use rights. In Ondo and Rivers States, infringements on the rights of ownership and use and violation of resource management rules have been the major sources of conflict associated with the artisanal fisheries. It has been possible to resolve the emerging conflicts through non-adjudicatory approaches such as negotiation, mediation, and arbitration. In these approaches the organization of conflict resolution is informal and the operational rules are clear, reconciliatory, and easily comprehensible. The strength and resilience of the approaches lie in the cohesiveness of the social, kinship, linguistic, and cultural interconnections among the owners and users of the fishing grounds. Usually, the resolution of conflict is accomplished speedily and openly and the process is relatively inexpensive.

Keywords artisanal fishery, common property, conflict resolution, water tenure

The artisanal fishery subsector accounts for over 80% of total fish output in Nigeria as evidenced by available data from the Federal Department of Fisheries. Nonetheless, the exploitation and management of the fishery resources have been based on traditional methods involving active participation of a large number of fishers, especially in the freshwater ecosystems including rivers, lakes, and lagoons. The resources have been a major source of employment and income from time immemorial in the maritime states of Lagos, Rivers, Ondo, Cross River, Akwa Ibom, and Ogun, all in the southern part of the country.

With rising population of fishers and commercialization of fishing, the competition for the exploitation of the resources has grown considerably over the years. Available data from the Federal Department of Fisheries indicate that the national population of fishers increased from 302,234 in 1985 to 470,240 in 1989 or by about 56%. In Ondo State the population increased from 5,448 to 11,296 or by about 107%, while in Rivers State fishers population rose from 40,830 to 89,304 or by about 119% during the same period. As regards commercialization, the report of a survey commissioned by the Federal Republic of Nigeria (1991) shows that artisanal fishermen in the country operate for between 30 and 50 weeks a year on average. The report also indicates that fishing is a profitable enterprise in the maritime states. It shows that in Ondo and Rivers States, which are the focus of attention in this study, operating profit in marine fisheries as of 1990 was estimated at N12,350 (U.S. \$1,536) and N12,786 (U.S. \$1,590), respectively,

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while in the riverine fisheries the estimates stood at N8,032 (U.S. \$999) and N6,648 (U.S. \$827) respectively (see Federal Republic of Nigeria 1991). Further evidence of rising commercialization in the artisanal fisheries is the widespread use of hired labor in the capture fisheries. According to the survey report, the share of hired labor in total operating expenses with respect to riverine fisheries stood at about 39% in Ondo State and 45% in Rivers State in 1990. This is contrary to the situation a decade earlier when labor for direct fish production was derived entirely from family sources.

The increasing dependence on fishery resources as a means of livelihood has been accompanied by not only a more intensive management but also a more vigorous exertion and assertion of ownership and use rights. What are these rights and how are they exerted and contested? More often than not, the control of access to and use of the fishery resources tends to be encumbered by varying objectives and preferences of different groups of resource users, different interpretation of rules, and different perception of existing usufructuary relations. Thus, even though the management approach provides rules for exclusion and regulation of use (Olomola 1993), it is not free of conflicts. The objective of this article, therefore, is to examine the causes, types, and resolution of conflicts in the artisanal fishery system. This is of paramount importance because the competence of resource owners and users in ensuring sustainable management and the resilience of management practices can be viewed in terms of their capability to resolve conflicts arising from the social relations associated with the control of access to and use of fishery resources. In other words, the sustainability of resource use can be jeopardized unless there is a viable built-in mechanism for resolving disputes. The remaining part of the article is structured as follows. The next section provides information on the area of study and method of data collection. In the following section we examine the tenurial and management context of fishery-related conflicts in the area, while the fourth section gives an account of the various types and sources of conflicts. The methods of conflict resolution are then examined. The article is rounded off with some concluding remarks.

Study and Database

This study was conducted in eight villages selected from two prominent fishing states (Ondo and Rivers) in Nigeria. Rivers State is located at approximately latitude 4°12' N and 5°50' N and longitude 5°22' E and 7°36' E. In Rivers State we selected Ogbema in Ahoada Local Government Area (LGA), Sagbama in Sagbama LGA, Kaiama in Yenagoa LGA, and Elele Almini in Ikwere LGA (Figure 1). Ondo State lies entirely within the tropics between longitudes 4°30' E and 6° E and latitudes 5°45' N and 8°15' N. The four villages selected from Ondo State were Igbekebo, Itebukunmi, Orereara, and Sabomi, all in the Ilaje/Ese-Odo LGA in the southern part of the state (Figure 2). All the selected villages fall within the freshwater swamp ecological zone where the mean annual rainfall ranges between 1,500 and 2,600 mm. The area surrounding each of the villages is suitable for year-round fishing in view of its favorable physical, ecological, and topographical characteristics.

The main fishing grounds include rivers, creeks, lakes (natural and artificial), and fishing pools. Fishing is carried out in the open waters of the rivers, creeks, and lakes as well as in the interior of the rivers and creeks. Suitable sites are also available in the streams and interior of rivers and creeks for the construction of weirs for fish trapping.

Data for this study were collected between July and December 1991 following a reconnaissance survey conducted in the study area early in the year. Data collection involved in-depth interviewing of key informants and focus-group discussions. In each village, 10 community leaders, including traditional rulers and chiefs, and 15 fishers were

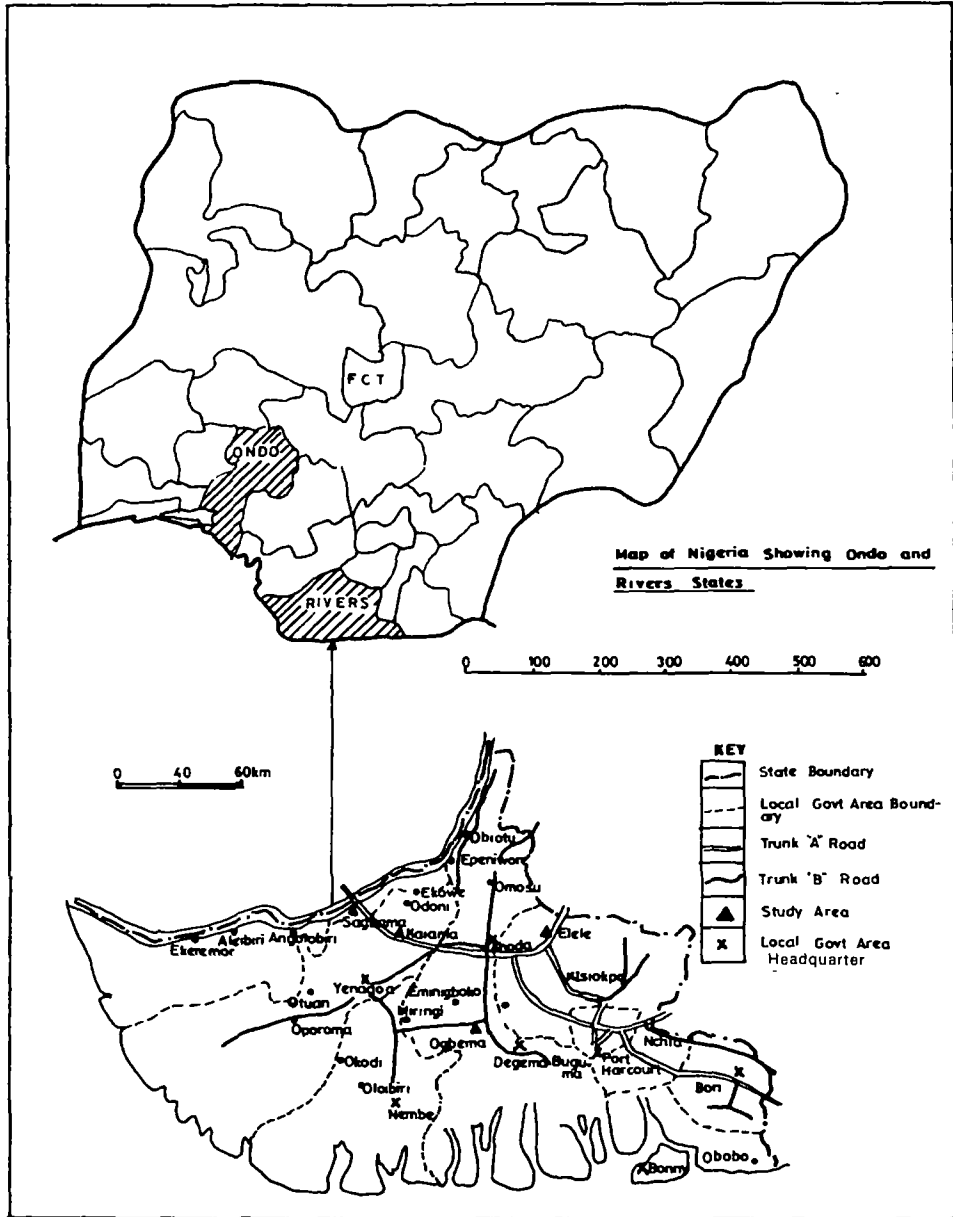


Figure 1. Location of study area in Rivers State.

included in the interview. For the purpose of gathering information on types of traditional authority and the water tenure system, including ownership and usufructuary rights, the traditional rulers, chiefs, and other community leaders were chosen as key informants. For more specific information on terms of tenancy, causes and types of disputes, and methods of conflict resolution, focus-group discussions were organized at the level of tenants, experienced fisherfolk, and community leaders. In addition, in villages where disputes have occurred, parties to the disputes were identified and interviewed. The fa-

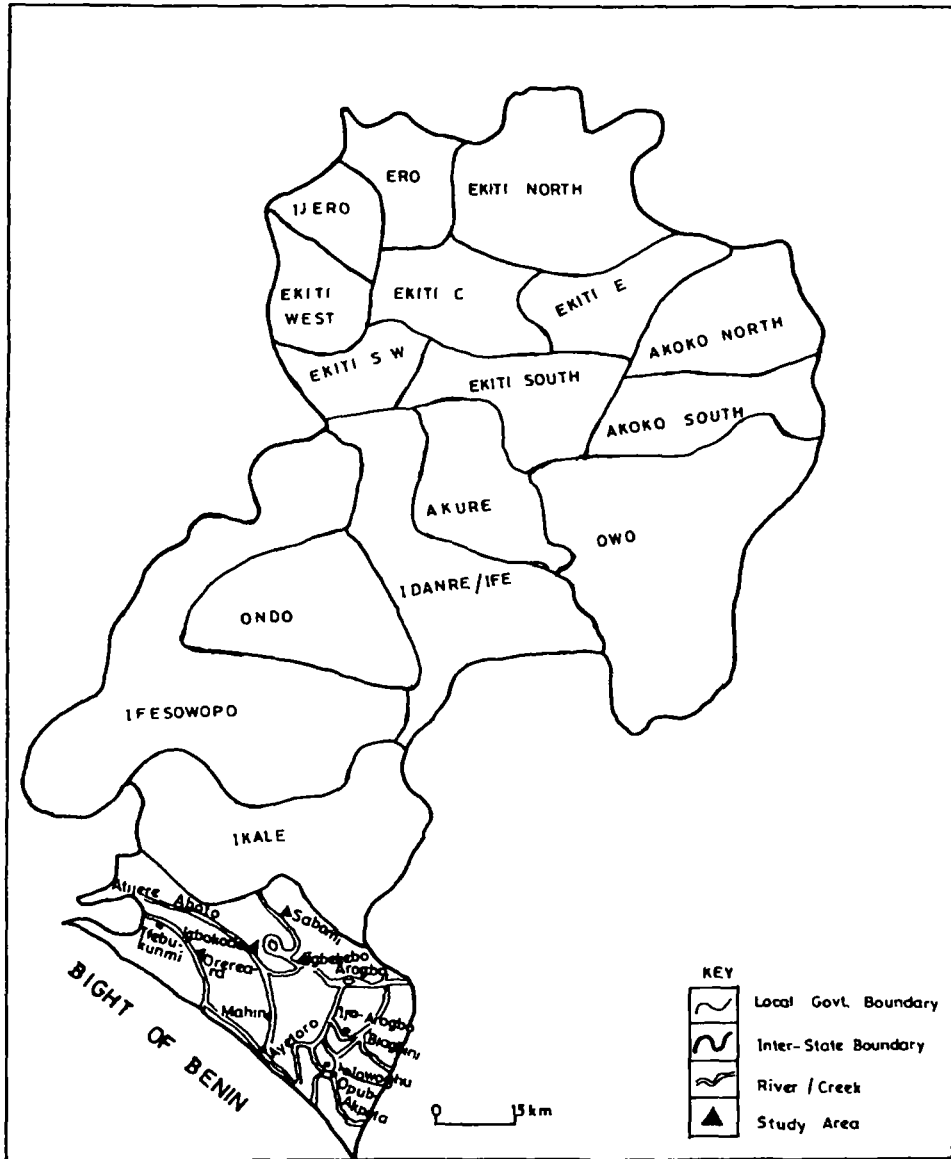


Figure 2. Location of study area in Ondo State.

miliarity of the author with the study area and his ability to speak the native language in some villages facilitated the collection of some otherwise sensitive information, especially with regard to the resolution of conflicts.

Tenurial and Management Context of Fishery-Based Conflicts

The conflicts in the artisanal fishery system are connected with three main issues relating to the pattern of resource ownership and management in the study area. First is the claim

over the rights of ownership of the fishery resources. In the riverine fishing communities, ownership rights derive from the prevailing water tenure system, which consists of communal ownership, family (kin group) ownership, and individual ownership, depending on the type of fishing ground. This pattern of ownership is consistent with the tenure systems in fishing communities in other parts of the world.

For instance, in the United States some shellfish beds and fishing areas among the straits of western Washington were formally owned by important men in the community. Rights to such property were claimed through inheritance (Suttles 1974). Among the Yurok Indians of northwest California, beach and seacoast rights were traditionally communal (Beals and Hester 1974). Even in the open sea, which can be defined as an open-access resource, Maine lobstermen claim fishing rights to particular areas. Harbor gangs are often present in the lobstering territories, and violation of territories has resulted in equipment destruction and other forms of violence (Acheson 1975). Communal ownership is also common in south India, where villages as a whole have rights to specific fishing grounds (Norr 1972), and in Japan, where fishing waters are defined by prefectural law, which usually conforms with traditional assignment of fishing waters (Norbeck 1954). The existence of usufruct or use relations in regulating access to fishery resources has also been demonstrated in Canada. In his study of Port Lameron Harbour, Nova Scotia, Davis (1984) points out that ownership and use rights are centered in the community, and individual use rights are derived from membership of the community. According to Davis, when fishers from a neighboring community persistently set gill nets in Port Lameron Harbour, the local fishers removed them because they considered the act a violation of their ownership and use rights.

In Nigeria and other parts of Africa, the emergence of systems of ownership and use rights relating to artisanal fisheries has a long history. According to Rowling (1956), the system of rights in the confining waters of rivers and streams among the Yorubas of western Nigeria is similar to that of farm land. In Cote D'Ivoire, the fishing areas are appropriated like land and a system of ownership and management similar to land tenure has developed. Over the years, fishing regulations and prohibitions relating to seasons and fishing days as well as gears and locations have been widely adopted in the lagoon fisheries (see Verdeaux 1980; Lawson 1983). Communal ownership of lagoons with a long history of traditional management has also been reported in Ghana (Mensah 1979; Kapetsky 1981). Scudder and Conelly (1985) cite Hickling (1961) as stating that in Kenya "most of the large weirs on the larger rivers are built and owned by the families that own the land on either side, their respective rights terminating halfway across the river." It is appropriate to point out, however, that there is a paucity of information regarding the nature of conflicts associated with the aforementioned water tenure systems, especially with respect to African fisheries.

In the riverine communities of southwestern Nigeria, the ownership of open waters in the rivers, creeks, and lakes, both natural and artificial, is communal. The indigenes of each community claim descent right over the use and management of the fishery resources. As common property, the resources are subject to rights of common use by all indigenes of a particular community. As descendants of the founder of a particular village, the indigenes regard themselves as having equal rights to fish in any of these fishing grounds. Even if an indigene of one community is engaged in an occupation other than fishing, his ownership rights cannot be denied. Such a person is free to enter into fishing whenever he decides to do so, and to participate in decisions relating to the management of the resources including the defense of the territorial fishing boundaries when the need arises. Members of the villages who presently have ownership claims over the fishing

grounds become owners by virtue of their membership of the particular lineages through which the villages were founded. Invariably, their heirs would also become coequal owners through the same genealogical affiliation.

Ownership rights over weir sites either in streams or in the interior of rivers and creeks can be claimed by some families or kin groups within a particular community even when the open waters belong to the community members (*indigenes*) as a whole. When a person discovers suitable sites for constructing weirs within the territorial waters of his or her village, the person has the right to develop the place by constructing weirs. The number and length of weirs depend not only on the available fish stock but also on the financial capacity of the fishers to acquire adequate fishing gear and to pay for the labor services required for weir construction. Such sites are bequeathed to the children, who become the joint owners of the sites upon the transition of their father. In recent times, new sites have been difficult to come by. The existing sites were discovered a long time ago by the fathers and grandfathers of the fishers and passed to a number of kin groups through inheritance. The weir sites cannot be transferred permanently by anyone within the kinfold or by the family members as a whole. Temporary allocation is permissible through a consensus among the owners by way of rent (especially to nonindigenes) or by unconditional loan to other members of the community, who could be allowed to use the sites only for one production season at a time.

The other form of ownership is individual tenure, which is found only in Rivers State among the *Ijo* (ethnic group) in Kaiama and Sagbama and is applicable only to fishing pools. During the dry season, individuals identify suitable areas (which can retain substantial volume of water) within the stream valleys and convert them into fishing pools. The conversion is accomplished using family labor and sometimes hired labor. Such pools are recognized by other community members as belonging to those individuals. An individual owner of a fishing pool(s) makes decisions about the time and method of fish harvesting and takes steps to prevent other members of the community from fishing in the pools. Ownership rights with respect to fishing pools are inheritable and usually pass from the father to sons who are interested in fishing. Today it is still possible for an individual to establish fishing pools, but the fact remains that current owners cannot embark on the transfer of ownership rights to anyone either through gift or outright sale of the pools.

The second issue from which conflicts have arisen relates to the acquisition of use rights. The mode of acquiring use rights in the artisanal fishery system varies between the two states and according to the type of fishing ground. Use rights have been acquired through inheritance, rentals, sales, and on the basis of the prevailing common property regimes. The rights, duties, and obligations of an individual differ considerably under these modes of resource acquisition. For instance, in Rivers State, varying proportions of the fishers derive their use rights with respect to all the types of fishing grounds from the existing regime of common property, which controls the use of and access to the fishing resources. The proportion of the users of fishing pools, rivers, creeks, and streams whose rights are guaranteed under the regime of common property tends to be higher (being about 88, 80, 78, and 61%, respectively) than that of the users of weirs and lakes, which is about 44 and 40%, respectively. About 60% of those fishing in natural lakes acquired use rights through rentals, while the rights of about 56% of those using weirs are based on inheritance.

In Ondo State, the majority of the sample of fishers operate in rivers and creeks, where 100 and 89% of them, respectively, acquire use rights on the basis of the prevailing regime of common property. About 62% of those using weirs acquired use rights

through inheritance, while acquisition by the remaining 38% is via rentals. It is pertinent to note that acquisition of fishing grounds through the latter medium, which applies mainly to strangers, is being considerably deemphasized in the state. In fact, of the four communities included in the study from the state, only in one (Orereara) can strangers still gain access to fishing grounds, and even then such access is restricted to weir sites in the interior of creeks. In the other communities, usufructuary relations with strangers were discontinued a long time ago (over four decades) because the available resources were considered inadequate to serve as a source of livelihood for both the indigenes and strangers.

The third issue in understanding the sources of conflicts relates to the management of the resources. The traditional authority in the study area not only is involved in the design of rules associated with the assignment of use rights but also plays a crucial role in the design of common property rules and in ensuring compliance with resource management practices. The need to ensure effective management of the fishery resources is often an important consideration in the design of tenancy regulations for strangers entering the area for fishing purposes. Usually, no tenant fisher is allowed to engage in any productive activity in the area other than fishing. The fishers are also not allowed to adopt fishing techniques other than the ones for which the prescribed rents have been paid.

In Ondo State, the tenants are migrants who engage mainly in fish trapping in weirs and bottom-set netting in the river edges and creeks. The rents paid vary according to the type of fishing gear. The annual rents paid by a user of fish traps range between N100 and N120 depending on the length of weirs in a particular location. Each user of nets paid a rent of N150 annually from 1989 to 1991. In Rivers State, the rents vary not only by type of gear but also by fishing intensity, measured roughly by fishing days per annum. However, the tenants have a wider choice of fishing techniques than their counterparts in Ondo State. All the tenants engage in bottom-set netting in rivers and fish trapping in creeks, while some of them also engage in drift netting (12%) and hook fishing (24%). Those who operated on a part-time basis, especially the Hausa fishers, who fish mainly during the dry season, had to pay an annual rent of N50 each in 1989; this increased to N100 in 1990. The rent for fish trapping was N120 in 1990 but increased to N160 in 1991. Tenants who engage in multiple fishing techniques (say, fish trapping, hook fishing, and bottom-set netting) were required to pay an annual rent of N450 each in 1991. All rents have to be paid to the community. The tenants are not allowed to operate fishing pools or to fish in lakes, both natural and artificial. Also, the part-time fishermen are required to sell their catches to the members of the women's trading association who are mainly fish sellers in the communities. In this way the community members are assured of a regular fish supply. Invariably, whatever is lost in terms of low rents can be gained from the moderate fish prices charged by the tenant fishers.

Although the fishers can continue to operate in all the fishing grounds where there is no restriction of any sort as long as they are able to pay the stipulated rents as indicated earlier, the situation is different with respect to the artificial lakes, especially in Kaiama. The rents for the use of such lakes range between N500 and N1,700 each. The period of transfer of use rights of any of the lakes to a particular user is limited to 1 year only. This is a management mechanism aimed at discouraging an individual from monopolizing the exploitation of the lake fisheries, and thus ensures that the benefits are equitably distributed among the community members. Fish harvesting in the lakes is done once in a year, and this could last for between 2 and 8 weeks, depending on the size of the lake. As a rule, no individual member of the community is allowed to have access to any of the lakes for 2 years consecutively.

The preceding issues are central to the cause and intensity of conflicts in the study area. The contestation of these issues can be viewed as a response to a number of factors, chief among which are (1) inadequacy of fishery resources, which is evidenced by the exclusion of strangers from fishing in some of the communities included in the study as noted earlier; (2) protection of property rights; (3) declining productivity of fishing in some areas, which is evident in the declining trend of the share of Ondo and Rivers States in the national fish output, from about 15% in 1985 to 10% in 1987, despite the fact that their share of national fishers population increased from about 15% to 22% during the same period; (4) need to maximize the benefits from the fisheries; (5) rising commercialization of fishing, which is evidenced by increasing demand for modern fishing inputs and the use of hired labor for fishing in several communities (see Federal Republic of Nigeria, 1991) as indicated earlier; (6) prevention of overfishing; and (7) need for the protection of an important source of livelihood. The types of conflict with which these factors are associated are substantiated in the next section.

Types and Sources of Conflicts

The types of conflicts can be described from the perspective of the parties toward the conflicts and the causes of the conflicts. In other words, the conflicts can be characterized in terms of who is involved and what exactly triggered the conflict. Typically, two parties are involved; and the most common pairs are (1) indigene versus community, (2) stranger versus community, (3) indigene versus indigene, and (4) stranger versus stranger. In terms of causes, the conflicts that have arisen in the study area can be classified into four categories, as described next. Essentially, breach of tenancy regulations and various acts of noncompliance with the common property rules constitute the major sources of conflicts.

Encroachment on Territorial Boundary

There were two clear episodes of the conflicts arising from encroachment on the territorial waters of a particular community in the study area. Both were typical cases of stranger-versus-community conflict in Itebunmi. The first episode arose when fishers from a neighboring community encroached on streams and rivers within Itebunmi's territorial waters, claiming ownership and use rights. The indigenes of Itebunmi could identify their territorial boundaries and are always united in claiming communal rights over the ownership and use of the available fishery resources. When the encroachment was first noticed, the indigenes accused the fishers of trespass and warned them to desist. When the trespass continued, the Itebunmi elders organized town guards to maintain surveillance over the disputed fishing grounds day and night and to apprehend the poachers. The intruders from Igboegunrin, who usually engage in hook-and-line fishing, had their gear confiscated when they were caught by the guards. Such cases were rampant in the 1970s. With continued seizure of their gear and the intervention of elders within their families who testified in favor of Itebunmi, the poachers surrendered and moved out of the disputed fishing grounds.

The second episode was in connection with the activities of fishermen from another village (Orereara), who also intruded into the Itebunmi territorial waters, carrying out drift netting day and night. Their actions reached a climax in 1991 when Itebunmi town guards embarked on a massive seizure of the drift nets of the intruders. Some of the intruders visited Itebunmi to contest the ownership of the fishing grounds and to retrieve their fishing nets. When the matter was brought before the traditional council in

Itebukunmi, it was proved that the fishers actually overstepped the boundary. Again the intruders surrendered and their nets were released having promised to stay away from Itebukunmi's territorial waters. The action of the intruders tends to persist for such a long time in view of the increasing number of unemployed youths who are entering the drift netting business. The territorial waters suitable for such a fishing activity in Orereara cannot sustain the fishing population. In Itebukunmi the resource constraint is no less critical, thus making it imperative for the indigenes to ward off any poachers and to protect their territorial use rights. Mounting of surveillance on the fishing grounds has since become a regular feature in the community.

Challenge to Traditional Authority over Resource Ownership

The episode of this type of conflict has been frequent in only one of the study locations. This is in Sagbama (Rivers State), where some natural lakes are owned separately by some indigenes while others belong to the community as a whole. Disputes have arisen as some families encroached on communal lakes and prevented others from fishing in such lakes. During the incidence the aggressive families would put up arguments to back up their claims of ownership and to justify their exclusive use of such lakes. The fishermen who were disallowed from fishing in such lakes usually reported the matter to some members of the traditional council, who in turn would alert their traditional ruler. The council of elders has had to intervene in several such cases over the years in defense of the customary rights of the community. This type of conflict has also occurred in Kaiama, but it is now a thing of the past since by consensus ownership of all natural lakes within the territorial boundary of the town has been conferred on the community in its entirety.

Trespass Relating to Individual Ownership

Two types of transgression against individual ownership of fishing grounds have been witnessed in the study area. The first one involved cases of indigene versus indigene in Itebukunmi and Kaiama. Individual ownership of weirs is permitted in Itebukunmi and the weirs could be inherited by the children of the original owner. The owners can use the weir sites for 1 or 2 years and stay away for another year or more before reconstructing their weirs. There have been cases when other fishers would intrude into such sites and construct weirs without seeking permission from the rightful owners. Upon learning of the intruders, the owner would ask the trespassers to remove their fishing gear from the area. If they fail to do so, such gear is usually destroyed, thus triggering a wave of squabbles and animosity between the two parties and their families. In any case if the trespasser insists and continues to claim ownership and use rights, the matter is reported to the *Bale*, who is the head of the traditional authority in the town.

In Kaiama, the dispute between indigenes over ownership of fishing pools is a common occurrence. Once a pool is opened up by someone and fishing is carried out for a season or two, the site cannot be claimed by anyone else. When the pool is not prepared for use in a particular season, the owner may permit any interested member of the community to use it on request. An entry into such a pool by someone without due permission from the owner is a common source of conflict among the indigenes. The owner usually refers the matter to the council of elders for settlement.

The second type of transgression against individual ownership was evident in the exceptional episode of stranger-versus-stranger conflict in Orereara. A tenant encroached on the weir site of his counterpart and refused to withdraw despite the complaints of the ag-

grieved tenant and appeals of the landlord. The conflict led to the destruction of weirs and fish traps. The owner of the damaged weirs had to bring the police to arrest the trespasser.

Violation of Fishery Management Rules

Although the traditional fishery management rules in the study area seem to be quite effective (see Olomola 1993), violation of rules is not uncommon. It is important to stress, however, that the capability of the traditional authority to resolve conflicts as they arise contributes to the resilience and effectiveness of the traditional system of fishery management. The conflicts arising from violation of management rules are of the stranger versus community and indigene versus community types. The former has been featured prominently in Itebukunmi, while the latter has been pronounced in Sagbama, Kaiama, and Igbekebo. In Itebukunmi there had been a ban on the use of castnets for catching the bony tongue fish (*Heterotis niloticus*). This, apart from being a conservation measure, was to avoid a glut in the production of the fish at any point in time and thus to ensure favorable price throughout the production season. The indigenes complied with the ban, whereas fishers from neighboring villages continued to use castnets even within the town's territorial waters. In 1988, however, the enforcement of the ban was intensively pursued. The violators were confronted by the local guards, who warned against further violation of the ban. Some strangers persisted until the guards had to carry out the mandate of the council of elders to seize their castnets and to chase them out of the Itebukunmi territorial waters.

Some of the indigenes of Kaiama and Igbekebo were fond of violating the regulation regarding the harvesting of immature fish. To reverse the trend, the local guards were mandated to monitor the fishermen and to report anyone found breaking the rule to the council of elders. Those who were caught for the first time were brought before the council, where they would be reprimanded and warned to desist. Recently, a fine of N50 or the imputed value of the fish caught (whichever is higher) has been imposed by the council on anyone who breaks the rule after the first warning. In some instances violation of the rule is a weapon often used by those challenging the ownership rights of the community. For as long as those rights are being contested, the challengers would refuse bluntly to abide by any management rules commonly agreed upon within the community.

The System of Conflict Resolution

The organization of conflict resolution in the study area is largely informal. Although the motives for precipitating the conflict may be multifarious, the critical issues to resolve often center around the rights of ownership and use. The operation of the system has tended to underscore the relevance of nonadjudicatory methods of conflict resolution, to which considerable emphasis is recently being devoted in the literature. Such methods are negotiation, mediation, and arbitration.

Negotiation involves reaching an accord after a series of dialogues between the two parties, during which they will jointly examine the issues involved in the dispute. With regard to mediation, the intervention of an impartial neutral party is often involved. According to Stulberg (1981), the mediator must be accepted by the disputants and the mediator's role is to assist them in identifying the knotty issues and design solutions which are acceptable to them. The settlement in both negotiation and mediation requires mutual agreement between the parties, whereas in the case of arbitration the decision or settlement is made by a third party. Nonetheless, the two parties have to agree to accept the decision of the arbitrator as binding and final just like the case of a law court (MacDonnell

1988). In view of the high cost of dispensation of justice under the conventional method of litigation as well as the associated delays and complexities, there has been substantial advocacy for the adoption of these alternative approaches. Indeed, considerations with respect to environmental disputes and conflicts associated with the development and use of natural resources have been at the forefront in the search for viable options (see Painter 1988; MacDonnell 1988).

Adjudication places considerable weight on the existence of a rationally discernible principle that can be applied to the current situation in order to determine the outcome, whereas disputes may be resolved under the preceding approaches by means of processes and according to rules created by the disputants themselves. With such processes, there is no universal (legal) principle to form the basis for the evaluation of arguments and validation of proofs. However, as demanded by the process of adjudication, a litigant must assert some principle or principles by which his arguments are sound and his proofs relevant. The adjudicatory framework provides for a distinction between a naked demand and a claim of right and between an expression of displeasure or resentment and an accusation. If a right is to be claimed it must be supported by a principle, and for an accusation to hold it must rest upon a principle (see Fuller 1978).

In spite of the tendency to avoid legal determinism in nonadjudicatory processes, the parties to the dispute are guided by some rules and they operate within a sociocultural framework that enjoins them to find lasting solutions and that guarantees their commitment to the resolution outcomes. This is evident in some of the approaches adopted in the area under investigation. As shown in Table 1, the most common approach to conflict resolution in the area is negotiation. The approach has been adopted to resolve conflicts relating to poaching by fishermen from near and distant locations, violation of fishery management rules, and challenge to communal ownership of fishing grounds, which has also been resolved through arbitration. It is only the resolution of conflict involving trespass into individual territories that has not involved the use of negotiation. This type of conflict has been resolved through a variety of methods including mediation, arbitration, and litigation. And it is only in respect to the resolution of this type of conflict that litigation and mediation have been adopted, albeit in different locations.

Table 1
Methods of conflict resolution in Nigerian artisanal fisheries

Type of conflict	Method of resolution	Outcome
Encroachment on territorial boundary	Negotiation	Pledge to renounce further encroachment Release of seized gears
Challenge to communal ownership of lakes	Arbitration Negotiation	Confirmation of rightful owner Abrogation of individual ownership of lakes
Violation of fishery management rules	Negotiation	Renouncement of further violation
Trespass on individual territory	Mediation Arbitration Litigation	Payment of fine Payment of damages

The council of elders in each community often plays a prominent role in the resolution of conflicts. Usually, the village head or paramount ruler of a town is the chairman of such a council; and he is usually the head of the negotiating team where the community as a whole is involved in the dispute. The village head or his representative will also be the head of a mediating team or arbitration panel. By tradition the authority of such a head is recognized and respected by members of the community. Nonetheless, the council often ensures that the claims of all disputants are thoroughly investigated before any decision is taken. Thus, in their roles as mediators or arbitrators the council members strive, as much as possible, to establish the truth and to appear as honest and trustworthy representatives of the community whose role should be seen essentially as that of a peace maker. Such attitude has been responsible for promoting and sustaining the trust of disputants and their commitment to the resolution outcomes. Besides, the nonadjudicatory approach has been transparent, inexpensive, easily accessible, and devoid of undue delays and complexities. In view of these attributes and its reconciliatory tendencies, the approach is generally preferred to the conventional process of adjudication.

The only conflict that was resolved through litigation involved two strangers (tenants) whose cultural backgrounds differ. The cultural background of the aggressor in particular differs from that of the community. Specifically, there are differences in terms of local language and norms. The aggressor in this case (a migrant from the neighboring Ogun State) speaks the Ijebu dialect, while the other tenant and the other community members speak Ilaje. The belief of the Ilajes is that they have superior knowledge of fishing and associated traditional management procedures because they are fishers by birth, meaning that many of them were born to fishers and they have practiced no other occupation except fishing since they started working. They regard the migrants as learners or amateur fishers, especially when they migrate from an ecosystem where fishing is not a major occupation. They believe that such migrants will have limited knowledge of management rules and their implications and are therefore more likely to misuse the resources and violate the rules. As it turned out, the aggressor lost in the court and he was asked to pay for the damages he had caused. During the litigation several work days were lost and at the end both tenants had to quit the community. Although they moved out on their own volition, such an action is a reflection of the common saying in the area that "no two litigants ever come back from the court and continue to be friends." This leads me to the argument that the decision about the course of action one is likely to take in resolving a dispute will depend on the stake one has in the community. Moreover, in the choice of approach to conflict resolution, the parties involved need to consider the consequences of the outcome and how their occupation, social relations, and income will be affected. In other words, it will be in the interest of the parties to adopt an approach that is not likely to dislocate them socially, economically, and psychologically.

Concluding Remarks

This study has examined the sources, types, and resolution of conflicts associated with the exploitation and management of fisheries resources in Nigeria. Fishing is an important occupation in the study area and the majority of the inhabitants depend on it for their livelihood. The rising population of fishers, increased commercialization of fishing, and acute competition for available resources have prompted the resource owners to be much more protective of their ownership rights than ever before. Infringements on the rights of ownership and use and violation of resource management rules have been the major sources of conflict associated with the artisanal fisheries. With limited resources and an upsurge in

fishing activities, resource owners have become much more sensitive to such infringements and have designed local actions to ward off external transgression by other fishers.

Nonetheless, it has been possible to resolve the emerging conflicts by adopting approaches such as negotiation, mediation, and arbitration, which are largely nonadjudicatory. The resilience of these approaches depends largely on the intricate social, kinship, linguistic, and cultural interconnections among the owners and users of the fishing grounds in a particular community. Besides, the organization of conflict resolution is highly informal. The strength of the approach lies in the cohesiveness of the social relations and pervading cultural affinity among the community members. Moreover, the rules are clear, reconciliatory, and easily comprehensible. Usually, the resolution of conflict is accomplished speedily and openly and the process is relatively inexpensive. Little wonder, therefore, that the nonadjudicatory approaches continue to be acceptable to disputants as alternatives to adjudication as far as conflict resolution in the artisanal fishery system is concerned.

It is important to stress that these approaches are not limited to the types and sources of conflicts identified in southwest Nigeria. Other forms of conflicts such as berth-draw conflicts and right of access, disputes arising from misplacement of fixed gear, and conflicts between fixed and mobile gear operators have been shown in the literature to be amenable to resolution by mediation. In each case, however, the main determinants of success in applying any of the approaches include a high level of understanding of societal norms and sociocultural background of the disputants. In his study of dispute settlement in the inshore fishing communities of Newfoundland, Canada, Phyne (1990) notes that the fishery officers who often serve as mediators in these types of conflicts are conscious of the prevailing local norms, and this has tended to enhance their ability to resolve conflicts.

The unfolding results are in support of this aspect of the findings of Phyne, but they contradict those of others, especially with respect to the effectiveness of the nonadjudicatory approaches. For instance, in his study of multiple use of swamp water in an Indonesian village, Vondal (1987) notes that the conflict that erupted from the activities of duck farmers who operated large fish traps could not be resolved by traditional rules of acceptable use of the swamp water nor by the traditional means of conflict resolution. The individuals who feel they are unfairly treated are powerless and have no advocate to help them solve the problem of inequitable resource use. Moreover, in the United States, the conflict between commercial and recreational fishing groups in the state of Florida has tended to defy amicable settlement and has been threatening the future of the state's inshore net fishing industry. Because of their limited economic base and diminutive political clout, the commercial fishers have not been able to cope with the pressures from the recreational fishers. The latter are bent on undermining the influence of the former over the marine resources of the state, which from time immemorial have been the main source of income of the commercial fishers. The emerging conflicts have been difficult to resolve through traditional methods (see Durrenberger 1990; Meltzoff 1989; Soden 1989; Jepson and Smith 1992).

In light of the above, it is appropriate to infer that nonadjudicatory approaches will succeed to the extent that the parties concerned with the resolution of the conflicts take due cognizance of the existing usufructuary relations and local norms; otherwise, the desired results can hardly be realized. For instance, in southwestern Nova Scotia, Canada, violation of the local customs by the fishery officers who usually enforce rules led to a bitter conflict between the officers and the local lobster fishers in 1983. The lobster fishers burned and sank two patrol vessels of the officers because in their enforcement prac-

tices they violated the local custom that prevented an individual from handling another's gear once it is set (see Davis and Kasdan 1984; Kearney 1989). Thus, undermining the relevance of local institutions, traditions, and customs is likely to be a major obstacle toward achieving a much wider application of nonlegalistic approaches to the resolution of conflicts in common property resource systems. Nonetheless, in the case of southwestern Nigeria, some policy lessons can be derived from the emerging results. Given the effectiveness of the traditional framework within which conflicts are being resolved, direct government intervention in the resolution of conflicts seems unwarranted. It is unlikely that any formal approach can be simpler and cheaper to operate than the prevailing traditional methods. Rather than investing in the design of a legal framework for policing, arresting, and penalizing offenders, it would be more rewarding for policymakers to place emphasis on strengthening existing traditional authorities. Traditional rulers and other community leaders who often play a leading role in conflict resolution need to be accorded official recognition by the government. It is advisable for government to work with them in defining the territorial boundaries of the fishing communities where they are currently nonexistent or in dispute.

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