Traditional Law of the Sea in Micronesia[1]

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Current discussions of sea law have centered largely around the rights of different countries in offshore waters. Here I want to talk about another branch of law of the sea—that which deals with the rights of people to coastal marine resources within single countries. A low priority has generally been given to this branch by legislators and legal experts in the Pacific islands. In Micronesia, for example, the law governing the allocation of coastal marine resources is ambiguous and therefore weak. I want to try to explain briefly why potentially serious environmental and economic problems are not being dealt with adequately as a result.

One of the reasons that legal confusion exists in this area is that traditional Pacific island customs concerning coastal marine resource use are quite at odds with traditional western legal concepts. The average westerner tends to assume that his customs concerning property rights have a kind of universal validity, other systems commonly being regarded as primitive. I would like to show why, in this instance, it is traditional western laws that are primitive.

The essence of traditional law of the sea throughout most of Polynesia and Micronesia is simply this: the right to harvest marine resources in the waters in the vicinity of a village or municipality is controlled by families, clans or chiefs, and no outsiders can use these resources without permission. It is a system that contrasts sharply with the western tradition of coastal marine resources open to all citizens.

Westerners, who are of course continental peoples, have had a legacy of abundant terrestrial food supplies, coupled with vast seafood resources spread across wide continental shelves. Pacific islanders, in contrast, have traditionally depended upon a narrow band of reefs and lagoons for about 90% of their animal protein. Thus the islanders have recognized for hundreds of years that their marine resources were limited. Their reef and lagoon tenure laws clearly reflect this knowledge. Westerners, in contrast, have discovered the seas limitations only in this century as overfishing of the continental shelves gradually became obvious. And most western laws still reflect our naive former belief in the inexhaustibility of sea fisheries and the outdated principle of "freedom of the seas."

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Marine tenure systems in Oceania are designed to enable the islanders to control the types and degrees of exploitation of their waters and thereby protect them against impoverishment. The mechanism is simple. Where fishing rights exist it is clearly to the advantage of those who control them to fish in moderation, for this ensures the future productivity of their fishing grounds. In the absence of such controls it would be to the advantage of a fisherman to catch all he could and to use destructive methods in doing so if they simplified his task. If he didn't, someone else would. Moderation would be pointless and the resource would therefore dwindle.

This, of course, is just what we have witnessed time and time again in the west in the past century in the absence of a mechanism for limiting entry into a fishery. And as a consequence western fisheries scientists have gradually awakened to the value of limited entry in their own fisheries. In fact, the subject has dominated discussions of western fisheries management for the past twenty years (e.g., Nielsen, 1976). But ironically, westernization is simultaneously threatening to destroy the traditional Pacific island system of limited entry—and in fact has already done so in some areas.

This has implications that go beyond the issue of conservation. As Marr (1976: 2) states, "Overcapitalization and thus economic waste is inevitable in a fishery in which there is unlimited entry." If coastal fisheries in Oceania continue to evolve, as some people hope, from subsistence fisheries into commercial fisheries, then retaining some form of limited entry is essential to the economic soundness of the fishery.

In the absence of limited entry it is virtually inevitable in a capitalist economy that too many fisherman will crowd onto the fishing grounds. Adding impetus to this trend in Oceania would be the facts that unemployment rates are chronically high and that no formal education is needed to become a fisherman. In this situation each fisherman will have to pay for boat, gas and gear to catch the fish that far fewer fishermen could have caught with a much lower total expenditure of money and effort. This is precisely what has happened time and time again in western fisheries and I see nothing to suggest that it will not happen in Oceania in the absence of limited entry.

As competition increases, potential profits will be increasingly swallowed up by unnecessary purchases on one hand and smaller catches per fisherman on the other. This is all well and good for the few businessmen who sell fishing and boating supplies. But imports already outnumber exports by an order of magnitude in Micronesia and in other parts of Oceania. Why import unneeded boats, motors, fuel, and fishing gear to contribute further to an already frightening trade deficit?

As westernization proceeds in the Pacific islands, new problems are developing in connection with marine tenure systems. One of the most common difficulties relates to the taking of baitfish in tenured waters by foreign tuna fishing vessels. In Fiji, Truk and Palau, for example, foreign tuna fishermen were forced to land and ask permission of the local chiefs in order to obtain baitfish in tenured waters. The proper formal presentation and granting of such requests on each occasion

took considerable time and hampered fishing operations so severely in each case that the tuna fishermen became discouraged and left. Valuable resources went unharvested as a result.

This problem could perhaps be avoided in the future if island governments negotiated long term agreements between tuna bait fishermen and the traditional owners of waters containing baitfish, incorporating some form of standard payment for the right to fish for these species.[1] Another alternative would be for governments to declare baitfish exempt from reef and lagoon tenure laws. This, of course, would be less satisfactory for it would weaken the tenure laws at a time when they need stronger legislative recognition. It would also deny the owners just compensation for resources that were traditionally theirs and, in addition of course, it would encourage overfishing.

A current problem which affects Palau, and possibly some other islands, concerns the relation between traditional boundaries and territorial seas. Palauans traditionally laid claim to waters extending as far out to sea as one could travel by canoe and still see the islands. However, fish in offshore waters are not an important local food source in Palau; the more accessible reef fish provide more than enough food. The offshore waters were once used for a special form of shark fishing, a sport traditionally practiced by only a few specialists. But this custom died out around the turn of the century. Consequently waters more than a few hundred meters beyond the outer reef edge are of little consequence to artisanal fishermen and tenure boundaries are not defended beyond the outer reef slope.

The traditional tenure rights of each of Palau's 16 municipalities are recognized under Trust Territory law to extend to the outer limit of the territorial sea. At present this boundary lies three miles seaward of the outer reef edge. However, Trust Territory sovereign rights will probably be extended to twelve miles in 1979.

This could create some serious inequities at least in theory. The lateral boundaries of Palau's municipalities are drawn in such a way that, if they are extended twelve miles out, some municipalities will have fishing rights extending over more than one hundred square miles of open ocean, whereas others will have only a few square miles and one municipality (Ngetpang) will have only about one square mile.

I think there is a need in Palau to reduce rather than expand the seaward extent of tenure boundaries. To be sure this would be removing from the control of Palauan chiefs waters over which they traditionally exerted nominal jurisdiction. But since tenure rights are not exercised in these waters in practice, offshore fishing might better be under the direct supervision of the district government authority concerned with the regulation of tuna fishing. It therefore seems desirable that the seaward boundaries of traditional fishing grounds be limited to waters lying inside a line perhaps one half mile beyond the outer reef edge.

Another problem relating to marine tenure in the Pacific islands concerns the reluctance of local fishermen to invest in expensive nets necessary to catch schools

[1] After this article went to press, I learned that the government of Papua New Guinea has recently done precisely this.

of migrating fish when they cannot pursue them beyond the boundaries of their own fishing grounds. An important source of food and revenue may thus be lost. This does not seem to be an insurmountable problem. If village representatives could be encouraged to work out cooperative arrangements, then a single net, jointly purchased at small expense to each individual, might be used cooperatively to harvest the school with portions of the catch, or equivalent cash payments, going to each participating fisherman or village.

Because of problems such as these there appears to be a growing temptation on the part of some Pacific island governments to weaken or invalidate traditional tenure laws. (In Palau, for example, a bill was introduced in the legislature in 1976 permitting "all residents of Palau to fish in any waters of the Palau Islands without the incumbrances of traditional right and ownership concerning reef and marine areas." It failed to pass.) It is argued that they leave the government unable to deal directly with overfishing and that they also, as just described, create certain problems in connection with the development of commercial fisheries. This is an understandable impulse, but it will not survive analysis. Whereas the traditional owners may in some cases allow overfishing in order to achieve quick, short-term profits, the fishing grounds will almost certainly be chronically abused if they are thrown open to all. A century of experience in North America teaches us this. Everybody loses.

In addition, any legislation that weakens marine tenure laws also reduces the ability of the owners to police these resources—something they do voluntarily if their rights are secure. Such legislation would therefore increase the government's regulatory responsibilities and place serious additional burdens on already understaffed and underfunded fisheries departments. The government would thus dispose of a service it got for free and assume new responsibilities it was ill-equipped to handle.

One criticism of reef and lagoon tenure has come from a different direction. An authority on Pacific island land tenure has questioned the continuing value of marine tenure (Crocombe, 1968). He argued that the introduction of motor boats, and the resulting greater mobility of people, plus the difficulty of marking underwater boundaries accurately will result in an unacceptable number of opportunities for conflict. The facts do not seem to bear out this prediction for Micronesia. As Knudsen (1970) pointed out, disputes over land tenure are far more prevalent than those over marine tenure in Micronesia. In Yap and Palau, for example, roughly one hundred land disputes reach the courts for every one involving marine tenure (Trust Territory Associate Justice, Robert Hefner, pers. comm.).

There are at least two reasons for this. Fishing areas are much larger than most tenured plots of land. Therefore there are not only far fewer of the former over which to dispute, but also, the ratios of their perimeters (line of potential dispute) to area (size of resource) are much smaller than those of typical land plots.

Secondly, the great majority of fishing disputes are settled outside the courts by owners who invoke traditional laws and use customary means of enforcing them.

In Palau, for example, a fine is levied against the chief of a village whose fishermen are caught poaching.

Consider, in the light of western experience, what will probably happen if reef and lagoon tenure laws are invalidated in Micronesia. Fish catches (and profits if there is a commercial fishery) will dwindle as overfishing proceeds. In an attempt to reverse this trend the government will erect a complicated array of regulations—closed seasons, closed areas, size limits, gear restrictions, licenses, etc. It will be the only course open to them other than to ignore the problem altogether. But it is an approach which has repeatedly proven both expensive and ineffective in the west in the temperate zone. It will prove even less effective in the tropical waters of Micronesia for at least five reasons.

1. There are far more species to deal with in the tropics. Thus more regulations and more enforcement would be required to pursue the same goals.

2. Biologists know much less about these species than they do about temperate marine food fishes and are thus poorly equipped to make useful decisions concerning their conservation. Furthermore, since the catch often does not go through a central market, catch data, which help facilitate scientific management, are sometimes almost impossible to obtain.

3. There are far more boats and far more fishermen to regulate per unit fish caught than in western commercial fisheries.

4. Government law enforcement is notoriously lax in Micronesia and will be further impeded in this context by fishermen who initially, at least, will resent the loss of their traditional laws and the imposition of strange new ones.

5. Pacific islands (with the exception of Hawaii, and perhaps Nauru) have far less money per capita than most western countries with which to try to cope with these problems. (The traditional marine tenure system has already been destroyed in Hawaii and the state has, not surprisingly, proven quite incapable of regulating the reef fishery effectively.)

In short, westerners are quite unable to manage multi-species tropical demersal fisheries on an efficient scientific basis and it will be many decades, if ever, before we are able to do so. Of necessity in the meantime, our prescriptions are based largely on intuition and good intentions. As a consequence our failures are legion, our successes rare. Traditional Pacific island management customs take on added appeal when we consider our own dismal record.

There are three things that must be done in Micronesia to protect traditional reef and lagoon tenure systems. One is to strengthen the law that sanctions them. The relevant portion of the Trust Territory code (p. 598) reads, "nothing in the foregoing Subsections of this Section shall withdraw or disturb the traditional and customary right of the individual land owner, clan, family or municipality to control the use of, or material in, marine areas below the ordinary high water mark, subject only to and limited by, the inherent rights of the Government as the owner of such marine areas" (emphasis added). What the "inherent rights of government" are in this connection are not specified, leaving open the possibility that they could be

construed in such a way as to interfere seriously with the customary marine tenure rights that the code purports to protect. This problem is expected to come up in a pending court case.

Official records of traditional marine boundaries are also needed. In Palau the outer marine boundaries of each municipality are officially recorded in the charter of that municipality. At least one municipality has internal boundaries that subdivide the reef into portions belonging to individual villages. These have not been recorded. In other Micronesian districts, reef and lagoon tenure boundaries are generally not recorded or only vaguely defined.

Traditional marine tenure customs must also be recorded in detail for each district and each municipality. And it must be done soon, before the old men who remember the details clearly have died and disputes arise among later generations who cannot agree on these details. As far as I can determine this has never been done in more than cursory fashion anywhere in Oceania.

Artisanal fishermen in Micronesia generally have little formal education and thus little understanding of the legislative processes that affect them. There are several reasons why their needs deserve greater attention. Whereas offshore tuna fishing involves relatively few individuals and the product is directed to the export market, artisanal fishing probably involves more island men than any other form of labor and puts essential protein into the mouths of the villagers.

In addition, the potential catch from artisanal fisheries is greater than is generally recognized. Palau, for example, has a reef and lagoon area covering about 2200 square kilometers. The average sustained yield from intensive reef and lagoon fisheries lies between one and five tons per square kilometer annually (Munro, 1973; Stevenson and Marshall, 1974). Palau therefore appears to have a potential harvest of between 2,000 and 11,000 tons of reef fish per year. The annual commercial skipjack tuna landings in Palau between 1965 and 1974 varied between about 2,000 and 9,000 tons annually (Mitchell, 1975).

Palau's potential harvest of reef fish is therefore of the same magnitude as its offshore tuna harvest. The same relation appears to hold true for Micronesia as a whole. Furthermore, the knowledge and technology necessary to harvest these coastal resources is well within the current capabilities of Micronesian fishermen—which is not the case when it comes to offshore tuna resources.

In summary, Pacific islanders discovered the cornerstone of sound fisheries management, in the form of reef and lagoon tenure, centuries before any form of marine fisheries management was seriously considered in the west. Difficulties arising from conflicts between traditional marine tenure systems and westernization and commercialization of island fisheries have resulted in its destruction in some areas and the threat of destruction in others. Where it still exists, it seems clear that the system must undergo some alterations in order to accommodate twentieth century pressures on it. However, the destruction of the system will ultimately create more numerous and fundamental fisheries management problems than it solves.

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