Flexibility and the codification of traditional fisheries management systems

In order to preserve what in many areas are rapidly eroding systems of traditional marine resource management, some governments and their advisers have called for the codification of traditional laws and rights in the legal institutions of today's centralised governments.

Caution has been urged regarding this approach, however, primarily because of concern that codification might 'fossilise' or 'freeze' traditional laws and customs, rendering the management systems unable to adapt to changing conditions in the biophysical, economic and political environments. At the 1991 South Pacific Commission's Regional Technical Meeting on Fisheries, for example, 'there seemed to be clear agreement that it is not desirable to dilute the flexibility of CMT [customary marine tenure] systems' (Hviding & Ruddle 1991: 8). Summarising the results of a 1988 SPREP workshop on customary tenure, Thomas (1989: 8) reported that 'the workshop did not recommend codifying custom, because it believed such action could rigidify changing practices'.

How, then, can governments go about reinvigorating deteriorating management systems (presuming that the systems are useful and should be maintained) while ensuring that those systems do not, in the process, become so stiff as to become ineffective? In this paper I review briefly some of the options facing policymakers, with a focus on the 'flexibility problem'. The main questions addressed are:

- 1) What types of flexibility are important, and over what time scales?
- 2) Just how flexible were traditional tenure and management systems?
- 3) Can codified traditional law incorporate the right types and amounts of flexibility?

What needs to flex?

Johannes et al. (1991: 3) cited the need for fishery management systems to be able to adjust to 'changing biological and socio-economic conditions affecting the fishery', and argued that customary tenure systems could do so more effectively than could government regulations. What sorts of bioby Tom Graham Department of National Resources Saipan, Northern Mariana Islands

logical and socio-economic changes might the fishery be subject to, and on what time scales might these changes occur?

Even over the course of a single day important changes occur in the marine environment, with shifting tides and the position of the sun affecting the locations and behaviour of fish. Lunar cycles are also important to reef fish - affecting tides, influencing the brightness of the night, and governing spawning behaviour. Seasonal cycles also influence spawning and other migratory activities.1 Seasons also bring changes in weather patterns, in labour markets (such as shifts among land-based and marine-based activities), and in local and distant seafood markets (such as cycles in the supply and demand of fish and other foods) all of which influence the fishing patterns of individuals and communities. Over longer time scales, such as years and decades, coastal communities might experience significant demographic shifts, restructuring of local, national and foreign economies and markets, changes in fishing technologies, and changes in the distribution of political power. Another important category of potential long-term changes is ecological changes - changes that affect the composition and productivity of exploited fish communities. All these changes can affect the way people harvest and distribute their marine resources.

Traditional flexibility

In order to cope with this broad array of potential changes, we have a lot to ask of marine resource management systems. How well did traditional management systems deal with these changes before contact with the West or with other newcomers?

It appears that they must have coped well with (and were probably built around) predictable economic and biological cycles, such as those associated with the moon and the seasons. In Bahia, Brazil, for example, Cordell (1989) reports that during the annual run of catfish into an estuary, fishermen relax the boundaries of their claimed fishing turfs and enter into temporary partnerships with other fishermen in order to increase their catches. Similar arrangements that accommodated short-term changes and needs were prob-

¹Johannes (1981) describes in some detail the tidal, lunar, and seasonal rhythms of the reef fish of Palau, as reported by local fishermen.

ably common in other such systems. In Palau, for example, 'fishermen were sometimes allowed to fish in their neighbor's waters providing they asked permission and agreed to pay a portion of the catch' (Johannes 1981: 65).

More permanent transfers of fishing rights may have also been common. Johannes (1981) reports that in about 1930 one municipality in Palau 'ceded' some territorial fishing rights to a neighbouring district. In Yap, rights to marine resources probably shifted among villages as the distribution of political power shifted (see Lingenfelter 1975).

Some systems may also have the ability to adapt to some of today's more rapid and unpredictable changes. In describing the present state of marine tenure in Marovo Lagoon, Solomon Islands, Hviding (1990) emphasises the ability of rightsholders and traditional leaders to focus on marine resource-related issues as they arise and to implement controls over their use on a reactive basis. Ruddle et al. (1992: 254) claim that the system in Marovo 'can handle many contemporary local issues related to subsistence and commercial use, as well as those involving demographic and political change'. The authors cite examples of Marovo marine rights-holders actively exercising their traditional rights vis-à-vis such contemporary developments as mining, logging, and the harvest of baitfish by foreign tuna fleets.

Notwithstanding this type of evidence of the resilience of some systems, it is questionable whether traditional systems in general were fostered under conditions that allowed them to readily adapt to unpredictable and rapid changes in the economic or political environments. Evidence of this is apparent in the many cases of eroding systems throughout the Pacific.²

My impression is that Pacific Island societies were built to be cautious. In order not to self-destruct, these small, isolated and closed societies must have had to develop institutions and customs that were solid and steady and that resisted social, economic and political change. One can observe on Yap – which used to be a very densely populated island – numerous customs and behaviours that effectively serve to avoid or minimise confrontations, and so tend to forestall change. Even the ubiquitous wars that shaped Yap's political structure were carefully orchestrated events; the outcomes and even the casualties planned in advance by carefully cultivated alliances (Lingenfelter 1975).

Marine tenure systems that developed in these types of societies must not have been exposed to radical socio-economic changes. In fact, marine tenure systems were probably important in stabilising society. Panayotou (1989) suggests that marine tenure systems may have arisen not out of the need to conserve fish, but rather in order to preserve social order and local power structures. Where fishing is the main source of food and employment, 'control of access to fishing grounds is tantamount to political and social control' (ibid:87).³ While this hypothesis has important implications with regard to whether or not traditional tenure systems can provide the means to conserve or optimise the use of fisheries resources, the relevant point here is that the inherent flexibility of traditional management systems with regard to longterm changes may not be enough to cope with the rapid and dramatic changes occurring in many Pacific Island societies.

Codifying traditional law

Where traditional tenure systems are collapsing because of the inability of traditional authorities to effectively allocate, arbitrate and enforce use-rights, codification of traditional law can serve to replace or reinforce the power of traditional authorities. A long list of potential problems associated with codifying use-rights has emerged in the literature, however. For example, fishing rights that are extremely complex, blurry and, in Cordell's words (1984:322), 'hard to define outside of a total social context', could make codification a formidable task. The most frequent argument against codification, and the one addressed here, is that formalising userights could make the system rigid and unable to adapt to future circumstances.

It seems to be a common assumption that codification of customary rights would necessarily result in those rights being set in stone – unable to be changed, their boundaries unmovable. Indeed, some codification schemes could result in this sort of scenario.

 $^{^2}$ The collapse of customary management systems has typically been viewed as their succumbing to the effects of the new politics, economies and technologies to which they have been exposed (i.e., they failed to adapt). An alternative perspective is that they have 'successfully' adapted themselves out of existence. For example, traditional tenure systems may no longer serve the purposes for which they were developed, or those purposes may no longer reflect society's changing values.

³ Panayotou further argues that a politically motivated management system would be less resilient to socio-political changes than a conservationmotivated system. This perhaps explains the current process of disintegration of traditional management systems.

But there are a host of other ways to go about codifying customary rights, and not all of them would result in an inflexible management system.

Most of our highly formalised systems of land ownership would not prevent a landowner from allowing his neighbour to pass over his land or to take fruit from his tree. Western legal systems tend to work well (i.e., provide adequate security to rights of ownership) only when property boundaries are well defined and well documented. But this does not prevent landowners from treating their boundaries as hazily as they like on a day-today basis. Most legal systems also allow landowners to divide, lease and sell their land. These are the attributes of ownership that allow land management systems to flex and adapt to changing circumstances. Is there any reason these attributes cannot be applied to 'ownership' in the marine environment?

Countries that are experimenting with individual transferrable quotas (ITQs) in their fisheries are currently assessing how well the rights to lease, divide and transfer those quotas lend themselves to some of the objectives of fisheries management (e.g., conserving fish, generating rents and allocating resources equitably). Some of the most persuasive arguments in favor of ITQs (a highly formalised form of rights-based fishing) concern precisely their flexibility. Holders of sufficiently flexible rights should, in theory, be able to maximise individual efficiency and therefore encourage efficiency in the entire fishery precisely through their ability to adapt to changes in the biophysical and socio-economic environments. Holders of such rights might, for example, be able to trade their share of the catch either before or after capture, and either temporarily or permanently.

The point is that laws do not necessarily restrict flexibility. They can, in fact, create and ensure flexibility. The same legislation that grants title to marine space or marine resources based on customary use could also provide mechanisms to allow (and/or restrict) those rights to be transferred, leased or divided – the primary elements of flexibility.⁴

Even modern markets, often seen as culprits in the destruction of tradition, can be important elements of flexibility. Consider, for example, a traditional society in which the harvest of fish was restricted to a certain social caste, and then distributed to the rest of society via various mechanisms of barter, such as for land crops or labour. If the traditional fishing rights were codified in modern law without any mechanisms to ensure an 'equitable' distribution of the catch, whole classes of society might be effectively shut off from the resource. In this case, the market, if allowed to remain open, would be the only way for those classes to obtain fish. (That modern markets tend to use cash is irrelevant.)

It is useful to treat codification not as a yes-no option, but rather as a continuum of options - a continuum that can be described in terms of the degree of codification. Even a law that merely 'recognises' tradition is a form of codified traditional law. A little farther up the continuum would be options that strengthen the authority of traditional leaders and institutions without dealing with specific rights or claims. This approach would leave the system with roughly the equivalent of its traditional flexibility: particular rights could be claimed, arbitrated, enforced, and exchanged, as was done in the past - under the control of traditional authorities. In Solomon Islands, for example, traditional rights to marine areas have not been explicitly codified, but the laws and policies of the government provide enough recognition of traditional laws in general for traditional leaders to continue to be able to exercise considerable authority with regard to claims to marine resources (Baines 1985). According to Ruddle et al. (1992), this approach is common among the governments of Melanesia. (Without inferring any cause or effect, they also note that it is in this part of Oceania that systems appear to have the greatest ability to cope with contemporary pressures.)

In some cases this approach of reinforcing the power of traditional leaders might not provide enough security to rights-holders. Possible problems include:

- State authorities might have a difficult time relinquishing power to traditional leaders, and it might be difficult to avoid overlaps and ambiguities between traditional and State law. In Yap State, for example, people complained of being punished twice for the same offence – once by traditional authorities and again under State law (MRMD 1991);
- 2) It might be very difficult from a practical standpoint to give power back to traditional authorities if they no longer have the 'real' power they

⁴ Scott (1988) provides a list of six quantitative characteristics of property, the magnitudes of which collectively determine the degree of interest in a property. "Interest" in this sense describes the degree of "ownership" in a property – the higher the degree of interest perceived by the "owner", the more he treats/uses/manages the resource as solely his own. One characteristic on the list is "flexibility". The others are duration, exclusivity, quality of title, transferability, and divisibility.

used to have. Traditional authority was based on political/social position which was in turn probably based on, or at least linked to, economic power. If, because of changes in economies, traditional leaders are no longer as wealthy as before, then they probably also lack the authoritative power they once had; and

3) Traditional means of enforcement and punishment may no longer be viable. Deterrents based on spiritual beliefs, for example, may not be as effective as they once were. The practical means for enforcing fishing rights, such as manpower and motorised vessels, might also be lacking.

In these cases, more explicit recognition of traditional law (i.e., a greater degree of codification) might be necessary. At the extreme, legislation could formalise specific fishing rights. The main advantage of this approach is that the State might be able to give more security and durability to fishing rights than traditional authorities. Potential problems with this approach include those already mentioned, such as the difficulties in documenting complex, blurry and disputed traditional rights. Also, attempts to codify geographical rights without incorporating associated customary rights, such as obligations concerning the distribution of the catch, might lead to inequitable allocations of the resource. However, it is stressed here that the most common argument against this approach - that the system will lose its needed flexibility - is not a convincing one. Lawmakers should not be discouraged from considering the great variety of options offered under the broad term of 'codification.'

For example, an option involving an intermediate degree of codification was offered in a report by a government agency of Yap State. It suggested that any effort at codification be directed at claims at the municipal or village levels, leaving claims made by estates, families or individuals to be administered locally, such as by traditional authorities (MRMD 1991).

Conclusions

Codification of traditional law can range anywhere from simply 'recognising' those laws to granting title to explicitly defined rights to marine space, species or fishing methods. Choosing from this spectrum of options should have little to do with the amount of flexibility offered by any of them – the right types of flexibility should be able to be incorporated into any of them. Rather, choosing the best option – that is, the most appropriate degree of codification – should have more to do with choosing the type of authoritative structure necessary to give rights holders the degree of security necessary for them to meet their purposes, whatever those purposes may be. If a high degree of codification is necessary to do so, then effort should be made to ensure that the law allows the system to flex in a manner consistent with its objectives⁵. Four examples are provided below.

- Short-term cyclic changes, such as those associated with tides, currents, and the sun, can be generally accommodated through the structure of the tenure system. This is where traditional systems should provide good models. A simple example is that if tidal and diel migrations of fishes are generally perpendicular and not parallel to shore, then boundaries of territorial rights will offer more exclusivity when oriented perpendicular to the shore.
- 2)Longer-term but predictable cycles, such as those associated with weather, spawning runs, and other migratory patterns of fish, can be accommodated through short-term transfers or dissolutions of fishing rights. Such arrangements might involve cash or some other compensation, such as surveillance duties, in exchange for the right to harvest the resource. Having fishing rights protected under law should – if the laws are crafted well – in no way hinder rightsholders from lending, leasing or temporarily trading fishing rights, just as they may have done in the past.
- 3) Non-cyclic longer-term changes, such as demographic shifts and changes in markets, economies and politics, can also be accommodated by transfers of fishing rights. A village that finds itself relatively depopulated, for example, might find it advantageous to transfer some of its rights either temporarily or permanently to more populated neighboring communities.
- 4) Finally, some changes in the biophysical or socioeconomic environments may be sufficiently rapid, unpredictable and/or dramatic to leave any management system unable to cope. In

⁵ Some government policies might be at odds with too much flexibility. For example, a policy that seeks to ensure that fishing rights continue to be held by indigenous or traditional claimants might require that the transferability of those rights be restricted. This type of restriction could also serve to discourage commercialisation of the fishery. Equity problems might also stem from too much flexibility. A State court in the U.S., for example, ruled that free transferability of fishing permits in a salmon fishery (whose value had skyrocketed after entry to the fishery was limited) represented 'unfair discrimination based on wealth' (State of Alaska Superior Court, Third Judicial District, No. 3AN80-7652; cited in Karpoff n.d.).

these cases, the law can simply be changed – it's done all the time. No legal system should be so inflexible as to prohibit this option. Even constitutions get amended.

In summary, codification should not be viewed as a hindrance to flexibility. The question facing governments that want to keep traditional management systems intact is not whether or not to codify; it is to what degree to codify.

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