## **Community-Run Fisheries: Preventing the Tragedy of the Commons**

by Donald R. Leal

**Chapter Summary** 

Don Leal sounds a different note from many of this volume's other authors in his piece on community-run fisheries. Some analysts, he notes, have argued that a simple shift to ITQs in the fishery has not led to fishermen accepting greater responsibility for stock management and conservation. This is because governments have generally conferred ownership of a share of the catch, but have kept for themselves the right to manage the fishery (such as setting the Total Allowable Catch), thus undermining the incentives that encourage owners to practise good husbandry. Rights-based fishing has thus, in some cases, not succeeded in reducing overfishing. Remarks Leal, "As a result, one of the key policy questions today is what institutional changes would get fishers to achieve the collective good of a fishery voluntarily?"

One institutional change that Leal believes would make a difference is regulation of fisheries by the communities that earn their living from them. In making this claim he explicitly challenges the assumption that, in the absence of government regulatory control, fishermen will get caught up in the tragedy of the commons in which the stocks are depleted through destructive competitive fishing. International experience seems to indicate that, when the right conditions exist, coastal fishers can co-operate voluntarily to prevent overfishing. This weakens another common assumption: that a fishery which is not regulated by government is not regulated at all.

The strong empirical evidence of the success of community-run fisheries has four important implications for those who want to make better fishery policy:

- in spite of their record of success, most community-inspired systems of self-regulation have not been recognised by governments as a viable scheme for fishery management;
- such systems have been shown to encompass key elements allowing communities to avoid the tragedy of the commons, elements such as social cohesion, local conditions and specialised knowledge;
- local fishers accord their own rules greater respect and legitimacy compared to government imposed regulations, making the enforcement of the latter more complex and costly;
- those who live from the fishery have a greater incentive to maximise returns from the resource than government managers, who cannot benefit from improved management efficiencies.

At the heart of Leal's argument is the notion that cultural and social norms can successfully constrain the selfish behaviour of individuals, and that this factor is not sufficiently taken account of by traditional economic analyses. Examples of such constraints include the shame and guilt that individuals bring on themselves when they refuse to respect group norms, such as respect for property or the keeping of promises. For such cultural constraints to be effective in a context like the fishery, political economists have identified six factors which appear indispensable.

1. Boundaries must be clearly defined so that individuals within a group know from which resources they can harvest and how, and so that individuals from outside the group know

when they are trespassing;

- 2. Group decisions will require rules that determine how the group parcels out the value of the resource;
- 3. Customary rules must be linked to the unique features of each resource and location so that the resulting rules are efficient. If they are not, there will be pressure to change them;
- 4. Because there is always pressure for self-gain, resources must be devoted to monitoring and enforcing the rules. That is, there must be positive returns for individuals who abide by the rules, or negative sanctions against those who violate norms;
- 5. Where conflicting demands are likely to arise between group members, resolution mechanisms such as local arenas for bargaining are necessary;
- 6. The rules must not be subject to change by higher levels of government.

Because the community-based approach requires a sense of belonging, group identity, and respect for group norms on the part of each participant, it will only work where there are strong mechanisms to exclude non-members, and stringent standards for admitting new participants. One consequence is that this system will not work where property rights are individually held and freely tradeable without reference to rules set by the community governing, for example, exclusion of outsiders. This limits the complementarity of these approaches within any individual fishery. While this represents one kind of obstacle to maximising the value of the resource, Leal makes the point that an ITQ-based approach itself can dissipate the value of the resource through the process by which the original allocation of rights is achieved or through a failure to establish true excludeability.

To bolster his case, Leal cites a number of historical and modern examples of well-functioning community-based fisheries. From pre-European aboriginal fisheries in Alaska through today's lobster fishery off Matinicus Island, Maine and Japan's Fishing Co-operative Associations, with detours through Exploits River, Newfoundland's Environment Resources Management Association and Quebec's ZECs (Zones d'exploitation contrôlées), these case studies provide an overview of the strengths and weaknesses of different models of community control. One particularly fascinating case is to be found in Norway's Lofoten fishery which

...has been described as the largest commercial cod fishery in the world both in terms of number of participants and the size of the harvests... There have never been quota regulations in the fishery. Nor has there ever been a special licensing system. For nearly a century, fishers have successfully implemented their own regulations, a responsibility delegated to them by the Norwegian government.

With the backing of the government, the fishermen themselves were able to put in place a complex array of control districts, enforcement and dispute settlement mechanisms. This legal standing for the community's management efforts was a key to its success, since the law "presented the principles for organising fishers democratically so they could decide the rules of the fishery and resolve conflicts." The Lofoten experience suggests that the principles of community-run fishing can be practised on a surprisingly large scale when the institutional support structure is there.

On the other hand, one Canadian experiment shows clearly how things can go wrong. The Atlantic Herring Fishermen's Marketing Cooperative (AHFMC) was allocated quota by the Canadian government and given the authority to manage it as a group. The experiment got off to a good start, but in a few years collapsed, not least because of the absence of a mechanism (unlike in Lofoten) to resolve conflicts between different kinds of gear. The AHFMC also lacked an effective mechanism for excluding from the fishery fishermen who left the co-op. Without sanctions, the organisation slowly faded into irrelevance and collapse.

In his conclusion, Leal argues that,

[d]espite being mostly limited to nearshore fisheries, informally organised community-run fisheries are fulfilling a valuable yet little publicised niche in fisheries management today. At the very least, governments should not waste valuable resources trying to regulate them and instead legalise their existence. This can be accomplished by establishing community property rights to nearshore waters having a history of local community use.

With respect to offshore fisheries, the jury is still out on the applicability of community-run models. Some early successes have been noted, but the author is of the view that the community approach may need to be supplemented with a limited partnership arrangement in each fishery. This would create a corporate body vested with "perpetual rights to present and future income streams from a fishery through the issuance of ownership shares", where the fishery is clearly delimited and allowable gear types determined. The right to participate in the fishery would flow from ownership of shares in the corporation, and the gear limits and other management conditions would be attached to the shares. This may help correct some of the weaknesses of the community-run model because,

...shareholders hold perpetual rights to a fishery's income opportunities and thus have a personal stake in maintaining the future value of the fishery through conservation. As with any company, share value will rise or fall depending on the earning potential of the fishery... If the value of the fishery declines, so will share value. On the other hand, if effort is reduced [in order] to rebuild future stocks, share values will rise.

Given the failure of government regulation to overcome the tragedy of the commons in many fisheries around the world, Leal concludes that the evidence is strong that the community-run, self-regulated fishery is an idea whose time has come.