

Fishing rights

Private rights tragedy

The Canadian experience shows how flawed economic theory works to undermine sustainable development in fishing communities

The possibility that the Food and Agriculture Organization of the United Nations (FAO) would sponsor an international conference on the allocation of fishing rights focused exclusively on the interests of small-scale harvesters and traditional fishing communities is heartening. Such an event is long overdue and, if it were to provide an opportunity to hear and document those authentic voices that have been resisting and offering alternatives to the private appropriation of public fisheries resources, it would be a good thing. It might even begin to re-establish some sense of balance and objectivity in the debate about the merits of different rights schemes by identifying those that work to support sustainable development in traditional fishing communities and those that undermine it.

If the objectives of such a conference were to include discussions about how the allocation of rights could “re-establish and formalize traditional fishing rights and thus, protect the rights of fishermen”, as Ichiro Nomura of FAO suggests (see *SAMUDRA Report No. 44*, pg. 25), it would also challenge the central orthodoxy of modern fisheries management; that in their natural state, fisheries develop in the absence of rights and play out the “tragedy of the commons”.

In “Opening the tragedy?” (*SAMUDRA Report No. 45*, pg 3), Bjørn Hersoug correctly identifies Scott Gordon’s *The Economic Theory of a Common-property Resource: The Fishery* and Garrett Hardin’s *The Tragedy of the Commons*, as the core intellectual foundations that underpin the theories of modern fisheries management.

But the Hardin contribution to this foundation is seriously flawed when it

comes to understanding fishing communities and how they manage fisheries resources held in common. While Gordon recognized that fishermen come together to establish rules to regulate fishing activity, Hardin did not. This is a very significant difference.

Gordon’s treatise recognized that the so-called common-property problem was, in fact, an open-access situation. Even the most primitive of societies, he noted, generally recognized the risks of overexploitation caused by unregulated access, and moved to regulate resource use for “orderly exploitation and conservation of the resource”. Societies that failed to do so, he posited, simply would not survive. Gordon recognized that humans live in societies that impose norms to inhibit socially destructive individual behaviour.

In Hardin’s construct, community or societal regulation is non-existent, and society is but the aggregation of selfish individuals, each seeking their own individual short-term advantage.

Since Gordon understood social control as an essential trait of human society, he did not prescribe the form it should take to avoid resource depletion. (Like Nomura, he appears to have been of the “one-size-does-not-fit-all” school.) On the other hand, the absence of community in Hardin’s flawed analysis led him to prescribe only two options to prevent resource depletion: paternalistic State management or privatization of the common property.

Sustainable management

In Canada, unfortunately, Hardin, not Gordon, has been used to understand the problems and make prescriptions for sustainable fisheries management. In fact,

it could be argued that Canada's modern fisheries management has followed Hardin to the letter: first, through a short-lived and failed experience with paternalistic State management; and, in the face of failure, the subsequent dogged pursuit, in many of the country's fisheries, of Hardin's alternative—the privatization and concentration of the common property in individual and primarily corporate hands, through market mechanisms.

The first phase—the one of paternalistic State control—started with the extension of Canada's fisheries jurisdiction to 200 nautical miles in 1977, and saw the uncontrolled growth of harvesting capacity, much of it encouraged by the government's desire to industrialize the fishery.

By the mid- to late-1980s, overcapacity, overfishing and sharp conflicts between fleet sectors over resource access defined many of Canada's fisheries. In Atlantic Canada, much of this conflict was between the traditional small-scale sector, known as the inshore fishery, and the highly capitalized corporate offshore and individually owned midshore sectors.

The second phase of Canada's modern fisheries management, dealing with this overcapacity through the allocation of property rights through individual transferable quota (ITQ) schemes, began in

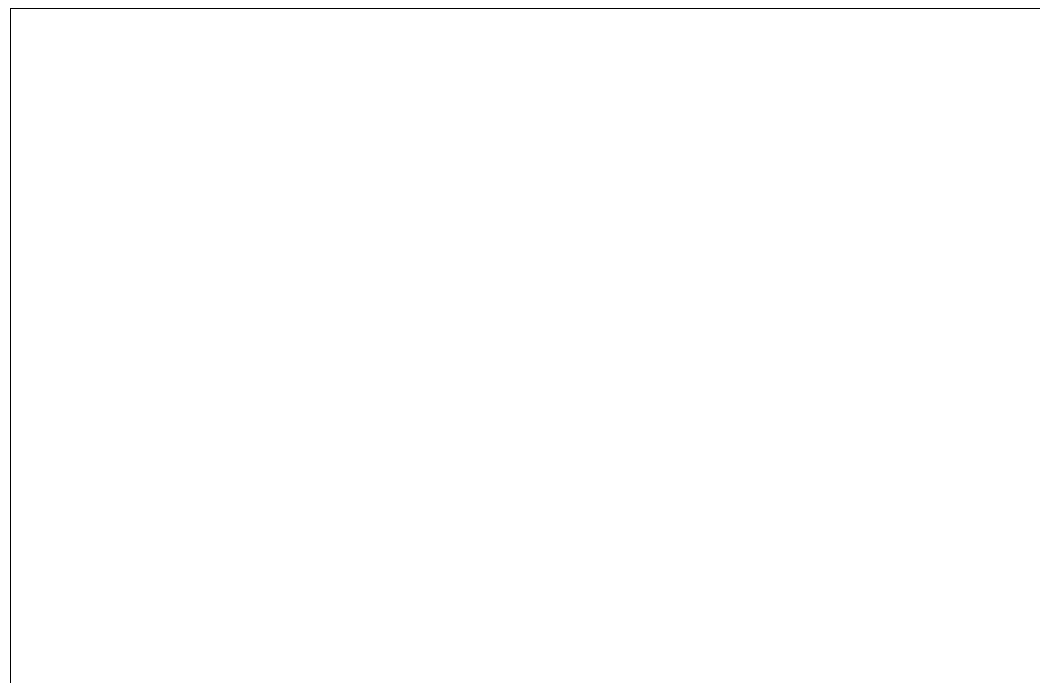
the late 1980s, and has been the State's preferred, almost exclusive, option ever since.

Descriptions of the Canadian State-sponsored private-property schemes can be found in the proceedings of both the *FishRights99* and the *Sharing the Fish 2006* conferences. They provide textbook examples of the efficiency of property rights and market-based mechanisms in putting a stop to the dissipation of resource rents in individual fisheries thereby generating rents and subsequently allowing the State to recuperate some of these through negotiated agreements with quota holders, an increasingly important objective of Canada's Department of Fisheries and Oceans (DFO) as it attempts to generate external revenues to compensate for more than a decade of continued budget cuts.

Critics in the small-scale fishery do not challenge the efficiency of classic ITQ systems in dealing with the macroeconomic problems of oversubscribed fisheries. The efficiency of the market is readily acknowledged. It is the externalized costs to fishing communities of the ITQ approach that is in question.

Small minority

From the small-scale/ community-fishery perspective, ITQ systems give rights and



benefits (including significant economic windfalls) to a small minority of individuals in fishing communities, who are encouraged to dispose of these rights in pursuit of their economic self-interest, irrespective of the impact on the community. Under this system, the benefits of the right go to the individual, while the long-term costs, in terms of employment opportunities, resource access and wider distribution of resource rents, get transferred to the communities and future generations.

In late 2004, the environmental non-governmental organization (NGO), Ecotrust Canada, published a major study on the impacts of resource privatization in Canada's Pacific fishery, documenting, for the first time, its costs from the perspective of community and the small-scale fishery.

According to the study, the capital costs of vessels and equipment in the Pacific fishery shrunk dramatically from Can\$777 mn in the pre-privatization period (the late 1980s) to Can\$286 mn in 2003, as fishing rights concentrated in fewer and fewer hands, and individual quotas eliminated overcapitalization in the race for fish. But the research also found that this decrease was offset by the soaring capital costs of quota and licences, which are now estimated at Can\$1.8 bn.

According to the report, "In the past, the problem was too many fishermen chasing too few fish, but today it has become too much money chasing too few fish. Overcapitalization in licence and quota has become the problem, especially in terms of social equity."

The costs of licences and quotas are now so high, Ecotrust Canada says, that a fisherman needs to be a millionaire to enter most British Columbia (BC) fisheries, putting ownership of licences and quota out of the reach of most rural families, aboriginal people and younger fishermen.

The study goes on to document how market-led mechanisms undermined the interests of traditional fishing communities by stripping them of fishing licences and quota. With virtually no

restrictions on who could buy fishing rights, rural ownership of both quota and licences declined precipitously. Traditional fishing communities—particularly aboriginal communities, which have been hit especially hard—lost 45 per cent of all major licences. The big winners were urban investors—both corporate and individual—who had better access to the capital needed to purchase the quotas and fishing licences that increased rapidly in value as more buyers entered the market.

Rural residents, hobbled by lower incomes, reduced economic opportunities and lower property values that limited their borrowing ability, simply could not match the prices urban dwellers and corporations were willing to pay for licences and quotas that were put up for sale by harvesters in their communities.

Another notable consequence of this transfer of fishing rights from rural to urban hands has been the siphoning off of resource rents from working fishermen to 'slipper skippers', absentee resource-rights owners, who do not fish but lease the rights they own back to working fishermen. In separate research, the Canadian Council of Professional Fish Harvesters (CCPH) has documented how in some BC fisheries, like herring, up to 70 per cent of the landed value in some years is paid to rights holders. Since the rights are leased at prices set prior to the fishing season, this has led to fishermen fishing an entire season at a loss. The practice of leasing is now so widespread that even those captains who own licences and quotas deduct the going market rate for leases from the calculation of crew shares, thereby significantly reducing returns to crew members. According to CCPH, the costs of leasing are also endangering the lives of fishermen as captains cut back on crew levels to reduce costs and also venture out in unsafe conditions because of the need to fish quota they have paid for, before the season ends.

Safeguards established

The DFO is now in the process of introducing ITQs for the Pacific salmon fishery, following the recommendations of Professor Peter Pearse, a consultant to the department who was also one of the keynote speakers at the *Sharing the Fish*

2006 conference. This will bring the last major Pacific fishery under a property-rights scheme. There is nothing to suggest that safeguards will be established to protect coastal-community interests as that process is launched.

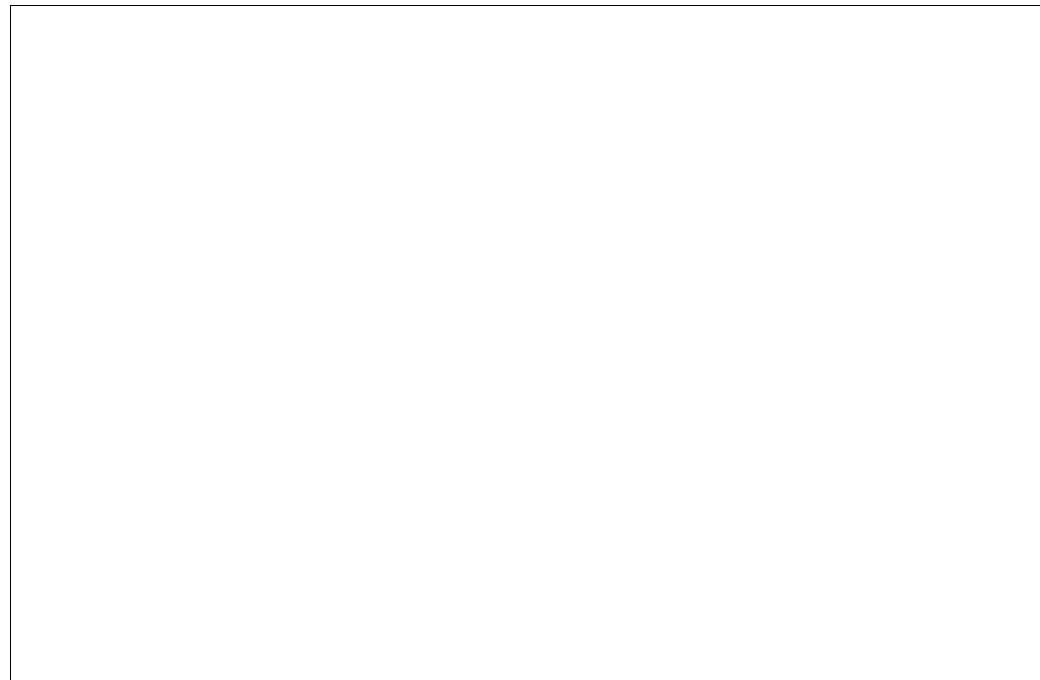
With property rights now firmly established in Canada's Pacific fishery and the costs of acquiring these rights beyond the reach of most residents of coastal communities, the only way to restore these rights to the communities that originally had them is by entering the rights market. This is what Ecotrust Canada now proposes to do. It hopes to establish a capital fund to acquire fishing licences in the open market, and then lease them to young, new entrants to the fishery from coastal communities at affordable rates. The irony here is that an NGO is having to raise significant amounts of capital to purchase rights in order to restore them to a new generation of rural residents whose predecessors acquired them for nominal costs but were allowed—even encouraged—by government policy, to sell them off to the highest bidder.

In Atlantic Canada, there has been generalized resistance to market-driven privatization by the inshore fishery, generally understood as comprising boats under 45 ft length overall (LOA). There, inshore fishermen's organizations have developed alternative rights-based

schemes to control and regulate access to the fishery. These alternatives tend to be value-driven, and are generally concerned with the equitable distribution of resource rents because of the impacts of inequitable distribution on coastal communities. They are also very process-oriented, seeking to build consensus through bottom-up, democratic decisionmaking that builds from the community level towards larger territorial units (region, province, inter-provincial). They have also tended to be ecocentric, seeking to provide small-scale harvesters with rights to the full range of harvestable species adjacent to their communities, using low-impact, fixed-gear techniques, as opposed to limiting these rights to specialist, single-species fleets using higher-impact mobile gear. Throughout the last 30 years of modern fisheries management, this community-/small-scale approach has been in constant tension and conflict with a corporate view of rights schemes that concentrates access and seeks primarily to maximize the generation of resource rents.

Modernization process

There are numerous examples of how the small-scale sector in Atlantic Canada has been successful in devising value-based rules to allocate rights and restrict access to the fishery. Very early on in the modernization process, as the State imposed limited entry to control access to fisheries resources, it made a significant



concession to the small-scale sector by prohibiting corporations from holding licences for species fished from vessels of less than 65 ft LOA. This became known as the 'fleet separation policy' as it prohibited fish processors from 'owning' inshore fishing licences, thereby 'separating' processing from harvesting.

Individuals who obtained fishing licences in the under-65 ft fleets also had to fish these licences themselves. They could not (and still can not) lease the licence or hire others to fish for them. This became known as the owner-operator policy.

Individuals were also prohibited from holding more than one licence for the same species but a multispecies-licence portfolio approach was encouraged for the small-scale sector, allowing only those who held certain key licences to obtain licences for other species as these became available either through harvester retirement or the development of new fisheries. The use of value-based criteria such as 'dependency' (level of income derived from fishing) and 'attachment' (length of time in the fishery) were also used first in the Gulf region of the Maritime provinces (New Brunswick, Prince Edward Island and Nova Scotia) under the 'bona fide policy' and, subsequently, in Newfoundland, under the fish harvester professionalization programme, to

restrict access to full-time fishermen. In Newfoundland, this led to the denial of access to approximately 15,000 part-time licence holders, cutting the numbers in the small-scale sector in half, a process that generated surprisingly little opposition, largely because of the extensive community-level consultations on the measures. Nowhere has the contrast been sharper between the value-driven approach for the equitable distribution of fishery rents and the rents concentration model than in the Atlantic's Area 12 snow-crab fishery.

Until the 1980s, snow crab was a marginal fishery in Atlantic Canada. The collapse of the Alaskan king crab fishery and the Japanese appetite for seafood conspired to increase international demand for this product and turn it into one of Canada's most lucrative fisheries. Under limited entry, access rights to Area 12, the most bountiful of the Atlantic's different crab-fishing areas, have been restricted to 130 licence holders, since the 1970s. (They include seven native-owned licences that were transferred to aboriginal communities following a Canadian Supreme Court ruling recognizing their treaty rights to the fishery.) This fishery is generally recognized as being well-managed.

Individual quotas

The owner-operator licence holders in this midshore fleet (vessels under 65 ft LOA)

moved to individual quota management with strict limits on transferability in the late 1980s, eliminating the race for fish and many wasteful practices. The licence holders fund and manage dockside monitoring, and contribute significantly to funding the government-based scientific stock assessment through co-management agreements. In many ways, the midshore Area 12 crab fishery is a model fishery except in one crucial area: the equitable distribution of resource rents.

The generation and concentration of rents, however, is the fishery's hallmark. According to costs and earnings estimates for 2002, this fishery generated gross earnings per vessel of more than Can\$750,000, and average net returns of Can\$363,000 for what amounts to a five-to-eight-week fishery. (The net return is the amount generated above the break-even point of Can\$400,000 per vessel. The break-even point includes salary of Can\$50,000 for the captain, and wages of Can\$29,400 for each of the crew, and a return on capital invested of 11 per cent.) Despite fluctuations in crab prices and total allowable catch (TAC), this pattern of very high profitability has been consistent for the last 15 years. It also contrasts sharply with the very low returns to both labour and capital for the 1,230 inshore-fishery licence holders in some of the same communities along the eastern shore of the province of New Brunswick (NB). These small-scale, multispecies fishermen, who derive most of their income from lobster but also fish other species in a season that lasts six months, generate net incomes per vessel between Can\$3,500 and Can\$5,600, after paying themselves wages between Can\$10,350 and Can\$14,000.

NB inshore fishermen were excluded from the snow-crab fishery until 1995, despite the fact that the resource was both plentiful and easily accessible to them using their existing vessels. In communities where unemployment is very high and where job opportunities outside the fishery very limited, this exclusion was a source of resentment, social conflict and general instability in the fishery. After extensive political lobbying, the Minister of Fisheries reallocated a small percentage of the

snow-crab fishery quota to NB inshore fishermen for the first time in 1995. Under the leadership of their organization, the Maritime Fishermen's Union (MFU), the licence holders chose to exercise this right in a highly creative and democratic way, with a strong emphasis on equitable distribution of benefits. Given that the allocation was not large enough to make a significant impact on each individual enterprise—had it been divided equally—the licence holders chose to hold and manage the quota collectively, through the MFU, and distribute its benefits in the following way:

- Approximately 60 per cent of the quota was divided into 11,000-lb individual quotas, which were distributed by lottery to partnership groups of four or more fishermen (that is, a partnership of four would receive 44,000 lb) who were leased crab traps purchased by the MFU. It was agreed that any fishermen who received quota through the lottery would not be eligible in subsequent years for another chance at receiving quota until all licence holders had received a 11,000-lb share.
- The remaining quota was fished by charter, and the proceeds were used to:
 - finance an extended healthcare plan for all 1,230 licence holders and their families; and
 - support a fish-harvester professionalization programme, finance scallop- and lobster-enhancement projects, and for scientific research on herring stocks.

Except for the years it was excluded from the crab fishery (1998, 1999 and 2000), the MFU continued to manage its allocation of snow-crab quota according to the same formula.

Fleet rationalization

However, the long-term decline of lobster landings in eastern NB and the deteriorating returns to the inshore fleet forced the MFU, in 2004, to significantly

change its strategy and to begin using the crab resource for fleet rationalization purposes.

It chose an approach, however, that was a radical departure from traditional practices. Instead of using market mechanisms or centrally managed licence buyback and retirement schemes, it has instead turned the crab resource over to fishing communities and empowered them to make the decisions on how best to use it to bring harvesting capacity in their communities in line with resource availability and fleet economic viability.

The approach, if it is successful, will ensure that revenues from the inshore crab allocation are spent in the best interests of coastal communities by allowing these very same communities, through democratic, grass-roots processes, to make these decisions themselves. Under the new approach, which was adopted in 2005 after extensive community consultations, the MFU continues to receive an allocation of snow crab on behalf of all inshore licence holders in eastern NB. From the proceeds of the crab allocation, it also continues to fund a health insurance plan, which is available to all licence holders and their families.

But the MFU no longer conducts a central lottery for the distribution of individual crab quotas. Instead, it distributes the crab quota on a pro-rata basis to 12 Communities of Interests (COI), territorial units made up of groups of inshore fishing licence holders who share a certain affinity/territory (see map). The COIs decide how many vessels will harvest their respective quotas and how much they will pay to have fishermen in their communities fish the crab according to harvesting plans determined and approved by all licence holders in public meetings.

The other significant change is that a mandatory minimum of 50 per cent of net revenues—after paying administration and health-plan costs—must be used for licence-retirement schemes in the communities. However, it is up to the COIs to decide how best to remove excess capacity in the fishery in their

communities, according to the funds available to them.

In addition, monies from the crab sales are also set aside in each COI for economic diversification and development funds to finance sustainable-development projects in the communities, again decided upon by the fishermen according to criteria common to all COI. For example, several COIs have already identified the purchase of lobster larvae for seeding in their communities from a project that was initiated by the MFU several years ago.

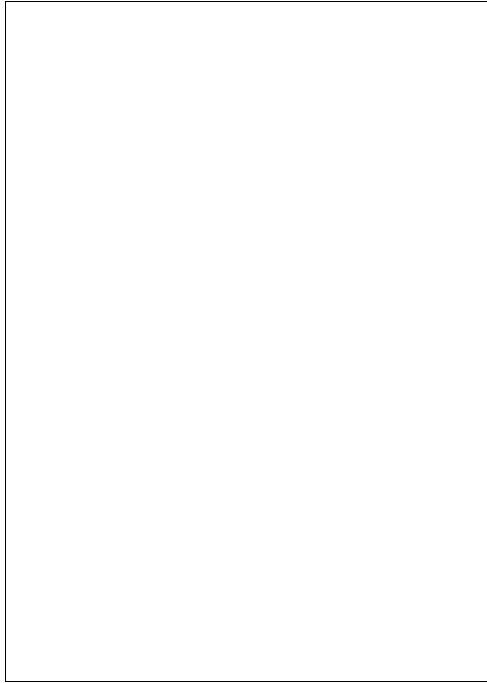
The COI approach to the allocation of fishing rights is a radical departure from the market-driven, individual-property-rights process experienced elsewhere in Canada. Instead of allocating fishing rights to individuals, who are then free to use them in the pursuit of their self-interest, irrespective of the impact on the community, it creates a situation whereby community interests are placed front and centre. In the words of the MFU, under the COI approach, fishermen have to organize themselves and make decisions collectively on the use of the fishing rights “to tackle both the problems of the fishery and the economic development challenges faced by their communities.”

The approach is designed to work in the long-term interests of fishing communities and to make fishermen accountable for the decisions that they make on the use of their rights. The programme is very new and has created all kinds of challenges for the MFU. It remains to be seen how successful it will be. But from the community perspective, it can do no worse than the alternative processes that have already proven to strip communities of access to fishery resources.

The Canadian experience with the allocation of tradable, individual property rights as a means for dealing with fisheries overcapacity shows that these schemes can be highly successful in concentrating the benefits of the fishery in the hands of individual rights holders.

Rights-based systems

These schemes, however, have worked to undermine sustainable development in traditional, rural fishing communities by



depriving them of access to fisheries resources.

In the best interest of their communities, the small-scale fish harvesters in Canada have consistently sought to devise rights-based systems for fisheries management that distribute the benefits of fisheries access equitably and avoid concentration.

If there is to be an international conference on rights-based systems focused on the interests of the small-scale fishery and traditional fishing communities, then representatives of the Canadian small-scale fishery would surely want to participate. They would not come forth proselytizing for ITQs, however, nor representing a 'temperate-world minority' view. Rather, I suspect, they would come to share, listen and learn as part of a universal majority of women and men who fish for a living, care passionately about their small communities, and want them to continue providing decent livelihoods for their children's children's children. ♣

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