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Rights-based management in Canada: Lessons from two coasts and a centre

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ABSTRACT

Canada has had experience with a number of different rights-based management programs for fish harvesting for more than thirty years. These programs have spanned both coasts, as well as been applied to fisheries in the central region. This paper sets the institutional context within which these programs operate, reviews selected programs for instances of successes and/or failures, and presents some lessons learned.

1. Introduction

Historically, fisheries have played an important role in Canada's development. For the most recent year available, 2008, the gross value of output from commercial sea and freshwater fisheries landings in Canada was $1.9 billion, employing approximately 53,000 fish harvesters and crew [1].[1] Most of the landed value (85%) comes from Atlantic coast fisheries—for the most part, shellfish, with very small shares from groundfish and pelagics. The Pacific share of overall catch is just over 14%, with groundfish making about half of that landed value, followed by shellfish and some pelagics. Less than 1% commercial freshwater landings come from the centre, largely from small fisheries on the Great Lakes.

This paper discusses Canada's experience with Individual Transferable Quota (ITQ) management programs with an eye towards the lessons that can be learned from successes and failures over the last thirty years. The rest of the paper is structured as follows. The next section describes in brief the background and institutional context that serve as the basis for fisheries management. Next, a selection of specific ITQ programs from across Canada are examined, with specific attention focused upon the evolution of the programs. A section that highlights some successes and failures follows this. The paper concludes with some lessons learned from the Canadian experience.

Individual Transferable Quotas are one type of a Catch Share program whereby a dedicated share of fish (defined as a percentage of the total allowable catch of the fishery) is allocated to an individual fisher who can then transfer that allocation to a different fisher. Catch shares imply a broader set of fisheries management tools. Catch shares can also be defined a specified percentage of total allowable catch and allow for transferability. However, they can also allow for the dedicated share of catch to be held by more than one individual in concert (e.g., cooperatives and communities can jointly own and manage the share). In addition, catch shares may have a geographical aspect, for example, Territorial Use Rights Fisheries (TURFs) that grant an exclusive right to the rights holder to fish in a specific fishing area.

1.1. Background and institutional context

Under the provisions of the Fisheries Act, the Federal government of Canada is responsible for managing fisheries, habitat and aquaculture. The Oceans Act also charges the Department of Fisheries and Oceans, the ministry with fisheries responsibilities, with oceans management responsibilities. Recently, provisions under the Species at Risk Act have also given authority to the Federal government to take actions that will prevent extinction of wildlife species. In addition, each provincial ministry is responsible for managing fisheries within its own boundaries; responsibilities include maintenance of healthy fishing communities, and regulation of commercial fishing including processing, marketing and distributional concerns. Since recreational fisheries lie for the most part within provincial boundaries, provinces oversee the licensing and management of these components of the fishery.

This complex structure of overlapping responsibilities between the Federal government and the Provincial governments serves as the basis for understanding how fisheries have developed over time. While past fisheries policy was interlinked with social employment policies, particularly for Atlantic Coast fisheries, more recently, a

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[1] This represents less than 1% of Canada's real GDP in 2008.

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broad concern for the welfare of First Nations peoples – specifically, recognition of fish for food, social, and ceremonial purposes – has become a driving force for policy decisions. In particular, as a result of a Supreme Court decision (Sparrow {R. v. Sparrow, [1990] 1 S.C.R. 1075}), Aboriginal fishing has the first legal priority after conservation goals have been met. This has implications for future commercial fishing management, particularly on the Pacific Coast.

Before ITQs were used in Canada the Department of Fisheries and Oceans (Federal) was responsible for the setting of Total Allowable Catch (TAC) levels on a species-by-species basis for commercially exploited fisheries. Biological information and constraints usually resulted in TACs being chosen without reference to economic and/or community considerations. The Department was also charged with monitoring, research, and data collection, in addition to its within-season management obligations towards the fisheries. Regulations designed to control over-harvesting tended to be reactive and, ultimately, ineffective [2]. Responses to open access inefficiencies and over capacity in harvesting sectors led to the adoption of successively restrictive rules regarding vessel characteristics, allowable fishing locations, and licensed participants. Management was complicated by multiple goals that conflicted with one another, overlapping jurisdictions, and by the needs of heterogeneous fishing units. For example, efficiency goals of rent maximization through rationalization came into direct conflict with policy decisions to subsidize and maintain fisheries as a way of life through employment insurance programs that discouraged fishers from leaving the fishery in search of better employment opportunities [3]. Other federal programs aimed at modernization exacerbated the race to fish mentality and resulted in a capital expansion that led to a more efficient, but overcapitalized fleet [4]. Overharvesting, in turn, led to the collapse of some fisheries (e.g., Northern cod in Atlantic Canada) whose effects were felt disproportionately in small, coastal communities dependent upon the fishery for most livelihoods. More recently, policies aimed at more efficient harvesting in West Coast fisheries have also been come into conflict with goals aimed at supporting aboriginal participation in the fishery [5].

1.2. Examination of selected ITQ programs

This section discusses a number of key features from a number of Canada′s ITQ programs. Canada′s first efforts to use ITQs began in the mid-1970s on the Atlantic Coast but ITQs are now widely used in all regions. This paper examines a selection of ITQ programs employed on each of the coasts, as well as for one of the commercial fisheries on the Great Lakes. Coastal fisheries are federally managed while the inland fishery takes place on Lake Erie and is overseen by the province of Ontario. Each sub-section begins with a brief history of the ITQ adoption, followed by details for the selected programs. The specific features discussed are: how and what is allocated, the means by which quotas are transferred, issues pertaining to monitoring and data management, and some unique aspects of the fishery.

1.2.1. Atlantic Coast

Eight years after the introduction of individual non-transferable fishing quotas for herring purse seine in the Bay of Fundy they were made transferable in 1983. This was around the same time that Canada adopted another form of individual “ownership”: Enterprise Allocations (EA). These were quotas available to large offshore groundfish trawling vessels owned by processors. Given the initial success, EAs were adopted for off-shore lobsters and scallopers in 1985. In rapid succession beginning in 1990, ITQs were adopted for smaller vessel fleets such as the inshore mobile gear groundfish [6].

The ITQ program for the Scotia–Fundy inshore mobile gear groundfishery began in 1991 and was targeted to a specific gear type. Historical catch levels were used to determine the percentage shares of the TAC for each of the eligible fishers. During the first few years ITQs were adopted for cod, haddock, and pollock; however, flounder and silver hake were added subsequently due to spillover harvesting effort directed at these fisheries [7]. In the initial years of the program, quota holders were allowed to exchange excess catches of one species for another at a predetermined rate. Unfortunately, this encouraged landings of species for which fishers did not have quota. Experience with fisher responses to program details led to a modification that has reduced overfishing of non-quota species. Fishers are now liable to pay a penalty for over catches of quota landings and also subject to reductions in the next year′s ITQ. From the onset of the program fishers were allowed to transfer quota between one another, however, the procedure was complex and fishers needed to make a formal request to DFO. Simplified transfer protocols have since been adopted and they have reduced management costs. Initially, fishers had up to 30 days within which to reconcile the impacts of transfers but, in recognition of the difficulties fishers had in meeting this, the reconciliation period has been lengthened to 45 days, with an additional two month period for transfers to be effected at the end of a fishing year [8]. One aspect pertaining to transfers that remains unchanged is that the government specifies overall limits on quota ownership.

Two interesting developments have arisen since the initial use of ITQs in this fishery. First, fishers have come to rely more heavily upon temporary, rather than permanent, quota transfers. Second, as expected, the introduction of transfers has allowed for an orderly exit of fishers. Consolidation has taken place and a number of larger operations own more than one quota license and are able to allocate licenses across more than one vessel. Each of the developments allows for greater flexibility in fish harvest planning and management of operations, suggesting that the fleet is evolving to be more homogeneous and efficient at harvesting the overall TAC than previously.

An important, but often overlooked, aspect of the introduction of ITQs is the need for better monitoring and data collection to support both the establishment of individual baseline holdings, as well as the undertaking of transfers. Such activities can mean unanticipated administrative costs to government agencies. Since the second year of this ITQ program fishers have been required to pay 100% of dockside management costs. A private company has been hired to collect the data. On the other hand, at sea surveillance is not complete; it is only required for larger vessels. Not surprisingly, DFO has become aware that the average size of fish measured at dockside is longer than the average size measured onboard vessels. This suggests that discarding has taken place. Recently, the government has mandated the use of satellite tracking of vessels and required that fishers pay the administrative costs of this service. In addition, the government has introduced mandatory electronic logbooks. This enables the regulator to track quota share usage in real time, providing timely information about the fishery.

This fishery has two unique features that are noteworthy. When ITQs were first introduced to the fishery, 50 licensees chose to pool their individual allocations and agreed amongst themselves to fish the overall amount competitively. These so-called “generalist” licensees were, in essence, fishers who targeted flounder but caught haddock and cod as by-catch. The number of such licensees has since fallen to one half and the members self-manage with seasonal quotas and trip limits, a structure that foreshadowed the formation of harvester cooperatives in the Pacific whiting and Alaska pollock fisheries. The second feature relates to the interaction between this mobile-gear inshore ITQ