Policy Brief 3

Fisheries Regulations that Work for the Inshore Fishery: The Case of Change Islands, NL

KEY MESSAGE

Change Islands is an outport fishing community that reflects the cultural heritage and traditions of Newfoundland and Labrador. Early settlement started in the late 1700s with the English Labrador fishery and complementary local inshore fishery. Fishing traditions have continued despite outport resettlement and ongoing threats to fishery resources and coastal communities. The fishery has changed in many ways, including the establishment of numerous rules and regulations brought about in part as a response to the groundfisheries collapse, as well as the emergence of new target species and global economic markets. These changes have increased the vulnerability of Change Islands' inshore fishing enterprises and fisher people.

This policy brief discusses key issues that affect fishing opportunities and the livelihoods of fish harvesters and fishing communities. Their concerns include: increasing rules and regulatory measures, including boat registration, licensing and enterprise combination policies; lack of stewardship incentives for by-catches and discards; and seasonal openings and closures. Opportunities for overcoming these challenges based on first-hand local knowledge of the fishery are provided in the hope of improving management and sustaining Change Islands' fishing heritage.

BACKGROUND

The harvesting component of the Change Islands fishery is managed through the Department of Fisheries and Oceans Canada (DFO) under the federal Fisheries Act. Fisheries management utilizes two types of regulatory controls: input and output control measures. Input control measures through license and entry limitations for sustaining the resources have been the norm since the 1960s.

Over time, and with the extension of Canada's jurisdiction in 1977, fisheries management and licensing policy have evolved from a system of almost 'open access' to being tightly controlled using a mixture of input and output controls. Fisheries science and policy began to move away from simple biological management to a more complex consideration of bio-economic and socio-economic factors, and more recently to ecosystem-based approaches. The rules and regulations have thus changed dramatically, affecting the viability of the inshore fishery.

One of the first allocation-based output control measures was Enterprise Allocations (EAs) assigned to offshore groundfisheries, which took full effect in the early 1980s. The late 1970s and 1980s saw provincial plans for expanding mid-shore fleets, capitalization of fishing fleets and high exploitation rates of groundfish stocks despite management and regulatory measures. This led to a number of key task force reports with recommendations for sustaining the fishery, including the Kirby, Keats, Alverson, Harris, Dunne, and Maloney Reports. With the collapse of the groundfisheries and subsequent moratoria, various restructuring and adjustment programs were introduced, in addition to more task force reports and policy measures. Key reports and management directives included: the Fish Harvesters' Professionalization and Certification Board, introduced in 1997; the Species at Risk Act and bilateral Canada-NL Cod Action Team established in 2003; a Canada-NL Recovery Strategy in 2005; a Canada-NL Fishing Industry Renewal Discussion Paper, and a Memorandum of Understanding (MOU) between the fishing industry and the provincial Department of Fisheries and Aquaculture signed in 2009 which

led to a 2011 MOU report related to rationalization of both the harvesting and processing sectors, in addition to marketing measures (see Policy Briefs 1 and 2).

The decline of the groundfisheries and related moratoria paved the way for growth in the shellfisheries, especially snow crab, which is considered the "keystone species" for the Change Islands' inshore fishery. Although the snow crab fishery dates as far back as 1968, it was originally only taken as by-catch, except in NAFO region 3KL (which includes Change Islands) where a seasonal directed inshore fishery existed. With expansion of the offshore fishery, snow crab regulations evolved from temporary permits for inshore vessels, to fishing licenses, quotas, area regulations, seasonal openings and closures, and an electronic vessel monitoring system.

One fish harvester remarked that over the course of his career, "the changes in the fishery for the past 21 years have been unreal". As a result fish harvesters feel overregulated to the point where, "it's got so bad you've got to get permission to put your boots on in the morning to go fishing." They also point out that new regulations are frequently introduced and have led to a set of rules that are complicated and constantly changing. So much that: "When you leave in the morning you don't know whether you're doing right or wrong."

In the following sections, key regulatory issues for the inshore fishery at Change Islands are presented. These issues were identified in a series of community meetings and interviews based on historical and current fisheries knowledge. Opportunities and insights for effective management, compliance with regulations, and roles for fish harvesters in resource stewardship are highlighted.

KEY REGULATION CONCERNS

Changing rules on allocation and access

The inshore harvesters of Change Islands suggest that an ever increasing number of rules and regulations in the fishing industry have made it expensive and difficult to conduct fishing activities. In addition to acquiring species-specific licenses fishing enterprises and fish harvesters must be registered themselves. The regulations concerning harvester registration have changed from designation as full time or part time, bonafide or commercial harvesters, to a new system of professionalization and Core and Non-core fishing enterprises. The criteria for Core enterprise license holders, according to the 1996 Commercial Fisheries Licensing Policy for Eastern Canada, include: being head of an enterprise, holding a key license, having an attachment to, and being dependent on the fishery. As of 1997, harvesters also receive personal certification as an Apprentice, Level I or Level II harvester, replacing DFO's previous personal fishing registration system. While experienced harvesters were given Level II status when the new system was introduced, today becoming a Level II fish harvester requires a minimum of five years fishing experience and training. Some harvesters appreciate the Marine Emergency Duties Course and the safety rules as relevant for their fishing activities; however, there are concerns about the cost of required courses plus living expenses for those studying outside of their hometown. Only Core enterprises can be transferred to another owner upon retirement and the transfer must be made to a Level II harvester. Currently, the Change Islands fishery consists of approximately 32 harvesters. The majority of these individuals are owners of a Core fishing enterprise, but the fishery also includes Non-core enterprise holders with Level I and II designations, and men and women who work in the fishery but do not own a fishing enterprise. There are approximately nine licensed vessels in the 25-45' range on the Islands; three up to

49'11"; and 20-25 additional vessels under 25' used in the lobster, and hook and line cod fisheries.

With the current demographic trends of youth outmigration from rural areas, an aging adult population, rules that discourage entry into the fishery, and escalating fishing costs, there are serious concerns that young people will not be able to enter into the fishery as older generations retire. While some measures such as owner-operator policies and tax relief for family enterprise transfer have been beneficial, the issue of youth recruitment into the sector warrants further policy review and assessment at the provincial level.

Increasing cost of permits and licenses

Change Islands' harvesters report that fishing regulations are becoming expensive and falling short of the key principles of the 1996 Fisheries Licensing Policy. These principles include amongst others: sustainable harvesting, economic viability, self reliance and industry partnership. Fishers feel overregulated by new and increasing rules and associated costs. There are three main federal fees paid by the commercial fishing industry to gain access to the resource: fisher's registration card and conservation stamp; vessel registration; and license fees. Licenses are purchased for each species and harvesters routinely pay for annual license fees even when they know they will not be used, in order to retain their harvesting rights. While license fees can be fairly modest, they have been increased and multiple fees on top of other operational costs add up quickly, especially when harvesters receive low prices for their catch. Additional costs include: on-board observer fees, dockside monitoring, and other cost-recovery measures such as harbour and ship safety inspection and fisheries management fees. If an observer comes aboard one's boat, the cost of their stay is the responsibility of the harvester. In some cases, because of limited space, this means that a crew member may have to be left behind. One harvester pointed out that rising costs and low economic returns create a 'cost-price squeeze'. "It is hard to make a living as a fisherman anymore" (see also Policy Brief 2).

Harvesting strategies and resource conservation

Discards, by-catches and sustainable harvesting methods are key conservation concerns that Change Islands fish harvesters identified for further policy review and evaluation. The harvesters see themselves as custodians and stewards of the fisheries resources that provide their livelihood. Many Change Islands' fisherspeople suggest, for example, that capelin should not be harvested at all because of low stock abundance and their significance in the food web, especially for groundfish recovery. Harvesters report that the prices for capelin are "ridiculously low" ($0.10 per lb), with dumping going on because the fishery is not economically viable. They added that, historically, harvesters used to be able to fish capelin only in boats less than 35 ft, then it went to less than 45 ft and ultimately to larger boats of 65 ft. Some inshore harvesters see this as an example of how the rules have changed to suit the larger boat fleets. Inshore harvesters observe that herring is also an important fish in the food web and that the herring quotas are very high.

Change Islands' inshore harvesters also identified cod traps and hook and line as more sustainable harvesting methods than gill nets. Most times, the fish is caught alive using cod traps. With the gill net, the fish are caught in the mesh net, affecting the quality as well as price paid by processors. Fish caught in a gill net get soft quickly, especially if they are fat with capelin. One fisherperson added that cod traps can be left longer and the

fish quality remains high. The quality of fish caught with a hook and line is also considerably better than gill net. One harvester describes, "I got my quota in four days with hook and line and got the best quality fish." The inshore harvesters argue that the big boat harvesters have pushed for the gill net, which is more profitable offshore. However, for inshore harvesters, hook and line methods are easier to use, more cost effective and result in a better quality seafood product.

Midshore harvesters also describe concerns associated with soft-shell snow crab restrictions in the relatively large TAC grids. DFO requests harvesters move outside the grid cell if the amount of soft-shell crab exceeds 20% of the catch. The reproductive condition of the species, however, is correlated with depth, which is variable within a grid. This means that one boat might pull up pots with a high percentage of soft-shell crab, while a boat just a mile away might not capture any. The current grid-based soft-shell protocols do not adequately take into account the spatial and environmental variability noted by harvesters. An understanding of the spatial patterns of environmental variability and their effects on the movements of marine species is something harvesters have relied on for generations, particularly in the shallower traditional fishing areas.

Harvesters have also observed that as soon as the snow crab vessels leave, the shrimp boats fish in the same area with heavy nets and destroy both the soft and hard shell crabs. As one harvester pointed out "the irony of the entire situation is that they closed down the crab on us due to soft-shell concerns and opened up to the shrimpers who kill everything."

Opening and closing dates for fishing

Fish harvesters of Change Islands feel that the opening and closing dates of various fisheries are inappropriate for various reasons, including economic conditions (e.g., supply glut and price concerns), stewardship, and safety concerns related to poor weather conditions. For example, harvesters were not able to begin harvesting crab due to ice until mid-May in 2008, and until early June in 2009. In 2009 the 3K crab fishery opened April 1 and closed June 15, shortly after ice conditions improved. This pushes harvesters to work long hours and make frequent trips, sometimes in bad weather in a desperate attempt to catch their quota before the season ends. Today snow crab is the single most important resource for fish harvesters, and critical to their livelihoods. Extensions are sometimes given, but with little advance notice, which highlights the need for shared decision-making and improved communication.

Some harvesters also observed that the lobster fishery is opened too early, when the water temperatures are unfavorable and ice is present. They suggest that the lobster fishery could be pushed to a later date when conditions are more suitable. Changing ice conditions off the coast of eastern NL make fishing difficult and affect safety at sea. According to some fish harvesters, thousands of dollars of fishing gear are lost due to ice conditions every year. Weather conditions also affect the ability to fish and for some species can jeopardize harvesters' ability to meet their quotas. Many inshore harvesters have a tremendous understanding of the marine environment based on generations of accumulated knowledge and their own empirical observations, including an awareness of the movements, abundance, and condition of different species in their region. They are frustrated by opening and closing dates that are applied to large areas that may not be suitable for local environmental conditions. Harvesters feel that opening and closing dates

should be determined in collaboration with fishers based on their local ecological knowledge and stewardship, as well as safety and market considerations.

Nets, tagging and safety at sea

Another problem faced by the fish harvesters of Change Islands is the use of tags and bobbers on traps and nets. All nets must be marked with bobbers as well as tags with their vessel registration number, representing an additional cost to the harvester. If bobbers or tags are not on the nets DFO charges a $500 fine. Lobster traps are out for weeks at a time (although checked daily) and the fish harvester's number can wear off the bobber, resulting in a fine if the bobbers are not replaced. Harvesters also suggest that rules related to gill net usage can be unfavourable. Gill nets must be set in the morning and hauled later in the evening, and can be left for a maximum of one night. If nets are not taken out of the water on the closing date, harvesters are charged - there is no leeway for consideration of unfavourable ocean conditions. One harvester stated, "They don't care if its hurricane winds, if the nets aren't out, you are charged." Harvesters argue that the rules should be more flexible and adapted to local circumstances such as weather and ocean conditions.

Boat registration and enterprise combining concerns

Changes in boat registration procedures and enterprise combining policies are also cited as a concern. Collaboration is reported to be very important for the survival of fishing enterprises in the community. Helping one another and often sharing vessels and quotas has been a well known practice in small coastal communities such as Change Islands. In the past, many boats had three to four traps; this would require more than one harvester for hauling. As a result, several people would work together, haul their traps and process what was often high quality fish.

A family of three fish harvesters explains that they would traditionally have fished together but due to enterprise combining policies and what is referred to as the "buddy-up" system now only two individuals can use their licenses and haul the nets on a shared vessel. This means that one of the three license owners must sell out or be left behind. They add that it is unsafe for two people to haul the nets and the gear cannot be properly managed. Hiring additional crew members reduces the revenues of fishing enterprises and depends on crew availability. The practice of working with others was particularly important for capelin harvesters, who would fish in smaller boats less than 35 ft. There are new rules for the capelin fishery and purse seine nets are used but one harvester pointed out "with the 'buddy-up' policy, we are not allowed to share the same net. This was always our practice, it doesn't make sense - we always shared the capelin net and helped one another out."

Sharing quotas for larger vessels now requires a change in boat registration, but when boat registration is changed, the vessel owner can no longer fish until the registration is changed back the next season. One fish harvester suggests that "people used to be able to catch four quotas and help one another out, but when the registration cannot be changed back, people cannot go fishing". Recent buddy-up measures prevent cooperative fishing practices at the community level. Together these and other regulations and restrictions are seen as "a way to decrease the number of people in the fishery and drive people out of small communities".

Competition with recreational fisheries

Fish harvesters of Change Island are concerned about competition with the recreational fishery in the summer for fish landings and potential local markets. The harvesters argue that the recreational fishery involves too many people, with no controls and monitoring measures, compared to the commercial fishery. They further added that "recreational"" fish harvesters are selling their catch locally. One fish harvester stated, "One can make more money fishing at the recreational fishery than the commercial fishery." This reduces opportunities for developing local markets for commercial harvesters (see Policy Brief 2).

POLICY SUGGESTIONS

Coherent fisheries management measures

Change Islands' harvesters emphasize that harvesting methods and gear types affect the quality of the fish caught as well as the price paid by the processors. Related concerns are best addressed through fisheries policies developed with involvement from the harvesting, processing and marketing sectors together with fisheries managers and policy-makers, drawing from shared knowledge that includes knowledge of specific conditions at the local scale. Trust and cooperation are essential but weak, –and could be enhanced through greater active engagement and dialogue, social learning and understanding multiple viewpoints. These policy directions are well documented in the governance approach outlined in DFO's 2001-2003 Sustainable Management Strategy and other policy documents but further attention to implementation is required given continuing divisions and breakdowns in communication.

Institutional partnerships between federal and provincial governments

Institutional partnerships between federal and provincial governments are a key requirement for a more coherent and coordinated approach to fisheries governance. Institutional partnerships within the fishery are not new; however, a federal and provincial structure or agency that addresses disconnects between the harvesting and processing policies is needed. Examples such as the bilateral Cod Action Team and the Canada/ Newfoundland Fishing Industry Renewal Strategy offer experiences to build upon. Defining a plan of action for these partnerships, including implementation strategies, expected outcomes and timelines, as well as a process for engagement of local stakeholders is necessary to deal with current and emerging policy issues and fisheries sustainability concerns.

Shared vision and co-management

Local ecological knowledge of the fishery acquired over centuries and through generations is a potential resource for stewardship and management. Interviews and kitchen table mapping with fish harvesters on Change Islands underscored the usefulness of their knowledge for collaborative management and stewardship initiatives. The on-going concerns of harvesters regarding soft-shell closures, food chain impacts, harvesting regulations, and other issues, necessitate a shared vision and stewardship. Similar initiatives and inputs in decision-making have been well noted in the province, such as the role of the fish harvesters' union (FFAW) in developing conservation strategies and stewardship measures. But Change Islands' harvesters describe paternalistic, uncaring attitudes and poor working relationships with managers. As one fish harvester criticized: "…the Department of Fisheries is not here to help us, only to harass us". These tensions create issues of trust and questioning of

the legitimacy of rules leading to non-compliance. Shared tasks and responsibilities through co-management arrangements can provide a catalyst for a shift away from an environment of distrust toward one focused on shared stewardship. Tools such as Integrated Fisheries Management Plans and Joint Project Agreements~~,~~ offer promise if shared decision-making accompanies shared costs and responsibilities.

There are many examples based on shared vision and community stewardship to emulate within the province and beyond. One such example is the St. Anthony Basin Resources Inc. (SABRI), a bottom-up organization with responsibilities for resource utilization and development of their local economy associated with a shrimp allocation. Another is the Petty Harbour Fishery Cooperative and community of Petty Harbour-Maddox Cove, which in the 1960s proposed and implemented, together with DFO, a ban on the use of destructive fishing gear (gill nets and longline) on local fishing grounds to safeguard the resource and protect traditional fishing rights. Subsequent efforts have ranged from tagging and monitoring programs to cod grow-out pilots. The Fogo Island Cooperative Ltd. has also been actively promoting sustainable harvesting strategies, value addition and price premiums for locally caught cod using cod pots, a modification of traditional techniques.

These examples illustrate the potential for inclusion of fish harvesters and local communities in~~to~~ management decision-making processes. Change Islands' harvesters are willing and ready to engage with managers on collaborative management to best conserve and be stewards of the resource. Two specific co-management activities suggested are determination of local opening and closing dates in collaboration with harvesters and in consideration of local environmental conditions, and the establishment of a special sustainable management/harvesting zone for local cod fishing grounds.

ADDITIONAL READINGS

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Fisheries Regulations that Work:
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ABOUT THIS POLICY BRIEF

This policy brief on Fisheries Regulations that Work: the Case of Change Islands is part of a SSHRC funded project that aims to address resilience of Change Islands and other coastal fishing communities in Newfoundland and Labrador. The Principal Investigator Dr. Derek Smith (Carleton University) and Co-Investigators Dr. Maureen Woodrow (University of Ottawa) and Dr. Kelly Vodden (Memorial University) have been working with Change Islanders to build adaptive capacity for fishing livelihoods that are viable and resilient to global markets and uncertain futures. This initiative seeks to build upon community knowledge to mobilize and improve management measures for local inshore fisheries. This series of policy briefs is intended to provide policy inputs and knowledge dissemination on aspects of fisheries and coastal community viability outlined below. The briefs are based on a series of interviews and report-back meetings with Change Island harvesters, Fishermen's Improvement Committee members and municipal representatives, discussions with fishing industry stakeholders and a thorough review of relevant policy documents. The briefs are available through a project website designed to promote a distinct heritage and fishing culture that spans three centuries.

See web link at: http://localknowledgechangeislands.ca

Policy Brief No. 1
Fisheries Rationalization

Policy Brief No. 2
Seafood Prices and Market Access

Policy Brief No. 3
Fisheries Regulations that Work

Policy Brief No. 4
The Viability of Coastal and Small Island Communities

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