

Fisheries allocation policies and regional development: Successes from the Newfoundland and Labrador shrimp fishery

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1. ACKNOWLEDGEMENTS

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2. EXECUTIVE SUMMARY

The sustainability of coastal regions in Newfoundland and Labrador has long been tied to changes in fisheries policies (Sinclair 1989). This report presents a detailed comparative study of the relationship between fisheries resource allocation policies in the northern shrimp fishery in Newfoundland and Labrador and regional development in key regions with substantial dependence on shrimp. The project explores how three different types of northern shrimp allocations influenced regional development in the areas of southeast Labrador, the Northern Peninsula of Newfoundland, and Fogo Island. Drawing on secondary sources and 54 in depth interviews, we found that shrimp allocation policy guided by the principles of adjacency and regional economic development goals resulted in the establishment of two innovative community-based organizations in southeast Labrador and the Northern Peninsula, and strengthened a third organization on Fogo Island. These organizations used relatively small shrimp allocations to help sustain local inshore and nearshore owner-operator fisheries within these regions, created or sustained employment for processing workers during a period of dramatic social-ecological restructuring triggered by the collapse of regional groundfish stocks in the early 1990s, helped sustain the tax base for regional communities and, to varying degrees, contributed to broader regional economic diversification and development outcomes.

These three case studies demonstrate that fisheries policies that clearly allocate resource shares to community-based organizations – with a mandate to use these resources and the profits/royalties they generate for regional economic development – can support viable fisheries and other industries that play a crucial role in the development of socially sustainable and resilient fisheries communities even in remote regions that are located far from larger populations and confront significant transportation and other challenges. The successes that we document in this report are based on business models that emphasize a holistic approach to regional economic development. Royalties are used to diversify coastal regions for long-term economic and social sustainability. While profitability remains a central goal, the business models of these community-based organisations stress the need for long-term economic and social sustainability, rather than short term profit. In this way, the three cases in this study provide strong evidence for the role that *community-based organisations* can play in developing *successful business models in remote coastal communities*.

Outcomes of allocation policies in these cases measure up well against the objectives of social sustainability contained in various fisheries management frameworks in Canada and around the world. The results of this study suggest that community-based fishery allocations and shares should play a stronger role in fisheries policies in the future here and elsewhere.

2.1 *Summary of recommendations for policy makers*

1. Formally recognize the fisheries policy and regional development success stories represented by the Labrador Fishermen's Union Shrimp Company (LFUSC), the St. Anthony Basin Resources Incorporated (SABRI), and the Fogo Island Co-operative Society Ltd. Formally acknowledge the role that community-based organisations can play in developing successful business models for the economic and social sustainability of remote coastal communities.
2. Establish a task force of fishing industry representatives, community representatives, policy makers, and academics:
 - a. to build on this report by identifying, mapping and examining the impacts of other regional, community-based quotas and licenses in Newfoundland and Labrador and elsewhere;
 - b. to affirm community-based fishery resource allocations as a significant and viable policy option in efforts to promote inclusive and equitable regional economic development;
 - c. to identify ways to create more licencing and allocation systems that will support the implementation of community-based access to and control over adjacent fisheries resources in a format that is consistent with federal owner-operator and fleet separation policy frameworks.

3. INTRODUCTION

This report presents findings from a study of the relationship between fisheries resource allocation policies and regional development in Newfoundland and Labrador's northern shrimp industry since it was established in the 1970s. The shrimp fisheries are of vital importance to Newfoundland and Labrador. They are complex, with multiple sectors, and have undergone considerable change in terms of resource management (i.e. quota allocations) and in terms of final markets in recent decades. Despite their importance, they are relatively understudied in academic and policy work (exceptions include Sinclair 1989; Davis 2002; Allain 2010; Foley 2012; Foley 2013). Some background information on the recent history of the fisheries is available through DFO's *Costs and Earnings Surveys* (DFO 2004; 2006), the recent *Report of the Independent Chair of the Memorandum of Understanding Steering Committee to the Department of Fisheries and Aquaculture in Newfoundland and Labrador (MOU)* (Clift 2011), documents produced in support of the application for Marine Stewardship Council certification, as well as in Paul Foley's research (Foley 2012; Foley 2013). Other background studies include a consulting report by Gardner Pinfold (2006), provincial government and industry studies (Vardy 2002; Shrimp Industry Working Group 2003; CCFFI 2008; Gardner 2008) and DFO's Integrated Fisheries Management Plan (IFMP) for northern shrimp (DFO 2007). Most existing analyses have focused on the economic challenges facing the industry as opposed to the relationship between shrimp fishery policies and regional development dynamics. In addition, there is little detailed knowledge available on the impact of resource allocation on regional development in remote coastal regions where the shrimp fishery plays an important role.

3.1 Case studies

This study focuses on resource allocation policies that affected three relatively remote regions of the province with strong inshore and nearshore fisheries. These regions are southeast Labrador, the Northern Peninsula, and Fogo Island (Figure 1). They have benefited from somewhat different shrimp allocation policies since the late 1970s. The case studies cover three different allocations of shrimp initiated in 1978, 1997 and 2000 respectively that, despite their differences, were premised on adjacency and on encouraging the capture of resource rents and employment in local areas. In each region, a single organisation acquired a central role in managing a relatively small allocation of the northern shrimp resource. Two of these organizations still have a shrimp allocation; the third and most recent recipient recently lost its allocation.

3.1.1 Southeast Labrador from Cartwright to L'Anse au Clair is our first region, which had a population of 4,713 in 2006. In the **case of southeast Labrador**, the main regional industry player is the Labrador Fishermen's Union Shrimp Company (LFUSC), which has been described as "probably Labrador's greatest success story" (Rompkey, 2003: 159). "The Shrimp Company," as it's commonly referred to in the region, is a fish harvester-owned company that was initially established as a cooperative in 1978 to apply for two offshore shrimp licenses that were allocated to southeast Labrador by the federal government following the extension of Canadian jurisdiction to 200 nautical miles. It was

successful in this effort and has managed these allocations ever since. The LFUSC currently employs over 500 people and operates a number of different processing facilities in southeast Labrador where they process landings of a variety of species from dozens of small-scale fish harvesters.

3.1.2 The **northern tip of the Northern Peninsula** including the communities from Big Brook to Goose Cove is our second region. The region had a population of about 4,700 in 2006 and is also home to an organization that is the product of a fisheries policy that prioritised adjacency and community access and control. In 1997, overall shrimp quotas were increased and a share of the increase was allocated to inshore harvesters in coastal regions of Newfoundland and Labrador still reeling from the groundfish moratoria implemented in the early 1990s. Fred Mifflin, the Minister of Fisheries at the time, announced that adjacency to the growing shrimp resource off Newfoundland and Labrador would be a “guiding principle” in new allocations. While most of the additional quota was allocated to individual harvesters in the inshore and nearshore sectors, a separate special allocation of 3,000 metric tonnes of shrimp was given to communities from Big Brook to Goose Cove – a small, fishery-dependent geographic region on the tip of the Northern Peninsula. In response, fish harvesters, plant workers, community representatives, and development group representatives created St. Anthony Basin Resources Incorporated (SABRI). SABRI currently manages the special allocation of shrimp for the benefit of the region.

3.1.3 **Fogo Island**, which consists of about 11 distinct communities that amalgamated under the Town of Fogo Island municipality in 2011, is the third region in our study. It had a population of 2,706 in 2006. The Fogo Island Cooperative Society Limited (hereafter referred to as the Fogo Island Co-op or Co-op) was established in the 1960s as part of a move to prevent resettlement of the island’s population. The recent history and success of the Fogo Island Co-op are intimately tied to shrimp allocation policy. Its fish harvester members were involved in the expansion of the inshore harvesting sector for shrimp after 1997. In 2000, the Co-op acquired a special allocation of shrimp that was contracted out and caught by offshore factory freezer vessels. Access to this allocation played a key role in establishing a shrimp processing plant in the region in 2000. This shrimp allocation played a key role in helping the Co-op recover from the devastation caused by the collapse and closure of regional groundfisheries and has become an increasingly vital part of the organization’s business since the late 1990s. Unfortunately, the Co-op lost its special allocation in 2011 in the wake of a significant decrease in the total allowable catch for shrimp. This reduction in the overall quota, coupled with the controversial implementation of a “last in, first out” shrimp allocation policy at DFO, produced this outcome.



Figure 1: Shrimp fishery case studies (Source: Cartography Unit, Geography Department, Memorial University)

3.2 Summary of findings

There are three distinct types of resource allocation in the northern shrimp fishery and each contributed to regional development outcomes: (1) *offshore licenses* granted to community-based organizations which, in turn, have contracted the harvesting and processing of the shrimp that came with the license to factory freezer trawlers owned by other companies; (2) *special*

allocations, which have typically been contracted out to offshore license holders under royalty arrangements; (3) and *inshore temporary permits* and licenses, which are governed by DFO's owner-operator and fleet separation policies.

Much of the focus of this report is on the first two types of allocations: how *offshore licenses* (LFUSC) and *special allocations* (SABRI and Fogo Island Co-op) for shrimp were utilized by community-based organizations for regional development purposes. However, the royalties and profits each organization was able to generate from offshore licenses and special allocations should not be seen as completely separate from the community benefits generated through the inshore shrimp permits established in the late 1990s. They should also not be seen outside the context of the community development contribution of federal owner-operator and fleet separation policies that are often the subject of intense discussion and debate.¹ In each region, inshore harvesters land significant volumes of shrimp for processing in coastal communities. The LFUSC is owned by inshore harvesters in southeast Labrador and is mandated to reinvest royalties and profits from its offshore shrimp licenses to develop the inshore fishery. Inshore harvesters and plant workers are represented on SABRI's board of directors and SABRI's initial core strategy was to use royalties from its special allocation to support the creation of a processing plant to reinvigorate the region's inshore fishery. Finally, the Fogo Island Co-op, which is owned by inshore harvesters and plant workers, sought a special allocation of shrimp in the late 1990s in large part to help secure funding for a shrimp processing plant so that its inshore harvesters could sell their shrimp to the Co-op, thereby creating additional employment in Island processing plants.

In each of the regions under study, *the inshore fishery remains the most important vehicle for advancing regional economic development; offshore licenses and special allocations for shrimp were used by organizations with strong representation from this sector to reinforce and foster this foundation of economic development.* The predominantly corporate-controlled offshore sector is exempt from provincial minimum processing requirements, favouring the export of product that is mainly processed at sea. It therefore tends to divorce fisheries resource benefits from coastal communities. However, community-based allocations in each of the regions under study shows how offshore resource benefits can be re-embedded in communities and regions in direct and indirect ways.

What is significant about the cases examined in this report is how portions of offshore resources (licenses, allocations, quotas) controlled by organizations with strong representation of inshore owner-operator harvesters on their boards resulted in the reinvestment of resource rents and

¹ In 2012, for example, Fisheries and Oceans Canada (DFO) released a consultation document, "The Future of Canada's Commercial Fisheries," discussing changes to and modernization of fisheries policy and management. The document sparked a broad-based and unprecedented mobilization of fishing and community groups. The Independent Core fishing fleet saw the discussion document as a "veiled attack on the Owner-Operator and Fleet Separation policies" that are responsible for ensuring that "access to the most valuable fishery resources is presently in the hands of the Independent Core fleet sector, the economic backbone of most of our coastal communities" in Atlantic Canada (2012: 10). Other industry groups, particularly some processors, and some academics see failure to reform the fleet separation policy as part of the cause of industry problems. Cooper and Clift recently argued that reforming the fleet separation policy to allow for vertical integration would be an "ideal change mechanism and starting point to assist the industry and rural communities throughout" Newfoundland and Labrador (Cooper and Clift, 2012).

profits from the offshore fishery to inshore infrastructure and employment in each region. In other words, fisheries resource allocation policy in the northern shrimp fishery combines principles of community-based allocations with principles underlying the owner-operator policy. *Our research suggests that these hybrids have worked well for southeast Labrador, for the Northern Peninsula of Newfoundland, and for Fogo Island. They also, we think, offer insight into how resource allocation policies might be designed to work in other contexts so as to maximize regional economic development benefits without jeopardizing small-scale fisheries or the owner-operator and fleet separation policies.*

3.3 Background to the Canadian northern shrimp fishery

Northern shrimp (*Pandalus borealis*) is a shellfish with significant populations from the Gulf of Maine to the waters between Baffin Island and Greenland. Canada's northern shrimp fishery refers to the capture of *Pandalus borealis* in areas between the east coasts of Newfoundland and Labrador and Baffin Island. The northern shrimp fishery is distinct from the shrimp fishery in the northern Gulf of St. Lawrence, which was developed in the early 1970s by longliner skippers who fitted otter trawls to their vessels to catch shrimp (Sinclair 1983). Some of the northern Gulf of St. Lawrence shrimp skippers came from Newfoundland's west coast, others from New Brunswick and Quebec.

The Canadian northern shrimp fishery was initiated by the Government of Canada in the wake of its extension of jurisdiction to 200 nautical miles in 1977 as a means to assert federal control over shrimp that was previously caught by Nordic distant water fleets of factory freezer trawlers (Parsons and Frechette 1989). The Canadian northern shrimp fishery was developed in collaboration with Nordic interests. It was driven by the goal of using it to promote employment and regional development in Canada and by United Nations obligations, with the over-arching policy goal of domesticating, or "Canadianizing," this former international fishery (Allain 2010). In 1978, 11 offshore licences were allocated to Canadian enterprises, with two granted to the Labrador Fishermen's Union Fishing Co-operative (see section 4.2 for an explanation of subsequent name change). Six additional offshore licences were allocated after 1978 for a total of 17, seven of which were held by aboriginal and other groups and the communities they represented. The federal government implemented policies to "Canadianize" the shrimp fishery in the late 1970s and 1980s and placed a series of conditions on new license holders to limit foreign involvement. However, a variety of difficulties constrained the "Canadianization" process (Allain, 2010), including the LFUSC's efforts to stall the process in order to avoid the capital commitments required to purchase vessels and to continue investing rents in inshore infrastructure. Royalty charters with Scandinavian, and later, Canadian companies enabled license holders who did not own vessels to receive millions of dollars in revenues. The offshore sector operates under an Enterprise Allocation system that was established in the late 1980s, with each license holder receiving an equal allocation within each Shrimp Fishing Area and with inter-enterprise transfers permitted in the current season. Prior to 1997, the northern shrimp quota was divided evenly between each of the offshore licenses, increasing to 2,211 mt in 1996.

Special allocations and inshore permits were distributed for northern shrimp in the 1990s. The federal government granted special allocations – not offshore licences – to several different

aboriginal groups and community organisations through the 1990s and 2000s. SABRI and the Fogo Island Co-op, two of our case studies, were granted special allocations of shrimp in late 1997 and early 2000 respectively. At the same time, inshore owner-operator harvesters along the northeast coast of Newfoundland and southeast coast of Labrador gained access to temporary permits to fish northern shrimp in the wake of the closure of local groundfisheries. Starting in 1997, the Minister of Fisheries allocated a share of increased shrimp quotas to 300 inshore harvesters in the 45-65 foot vessel sector who were able to purchase or finance the gear required for this new fishery. Harvesters and processors in some fishing communities where livelihoods had depended on cod and other groundfish shifted their focus to this new and, at the time, increasingly abundant resource. Temporary permits were eventually converted to regular licenses in 2007 to promote stability in the inshore fleet. The resulting owner-operator shrimp fishery is governed as a competitive fishery with competition constrained by trip limits and production caps set by the industry (Allain 2010).

There can be little doubt that the remarkable growth in Newfoundland and Labrador's shrimp industry has played a crucial role in alleviating the impact of the 1992 and other groundfish moratoria for some companies, harvesters, processing workers and communities. This is particularly the case for those harvesters, processors and processing workers in the inshore sector. In 1994 the quota for northern shrimp was 22,500 tonnes, all caught and processed onboard offshore factory freezer trawlers. By 2007, the quota had increased to 165,000 tonnes (Figure 2), with a significant portion of the tonnage either landed in coastal communities by inshore owner-operators and processed by plant workers or landed in the offshore with royalties paid to cooperatives and companies with ties to the inshore sector in often remote regions. The number of owner-operators fishing shrimp in NL increased from 50 operating in the Gulf of St. Lawrence in 1994 to over 360 by 2007. Significant investments were made in onshore processing to create specialized plants designed to handle the landed shrimp. The corporate-owned offshore factory freezer sector also benefited substantially from quota increases. By 2008 the Newfoundland and Labrador shrimp fishery as a whole produced \$180 million in export earnings.

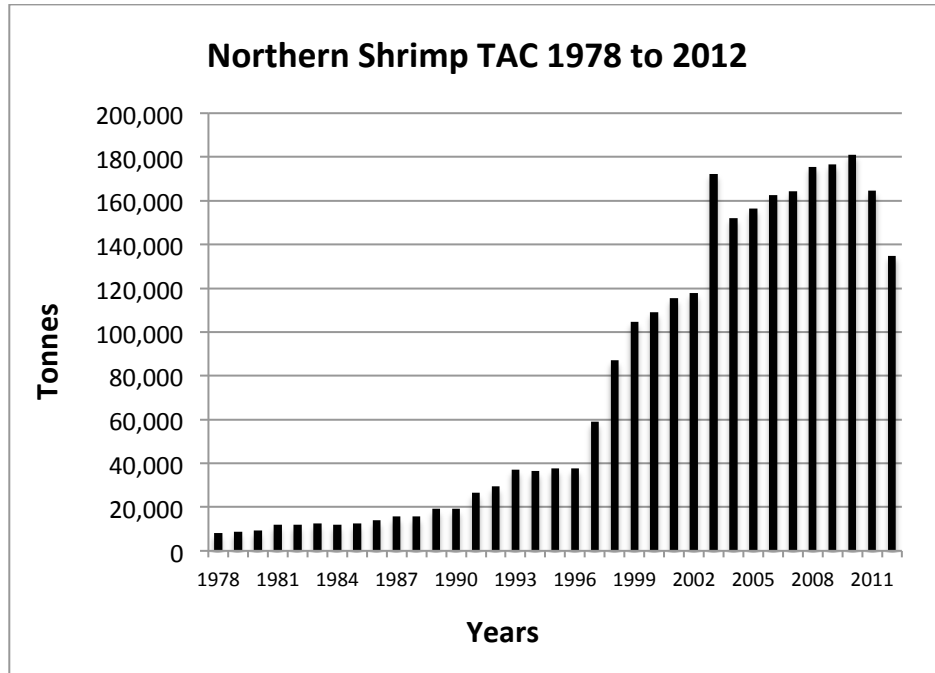


Figure 2: Northern shrimp TAC 1978 to 2012 (Source: Department of Fisheries and Oceans, Quota Reports)

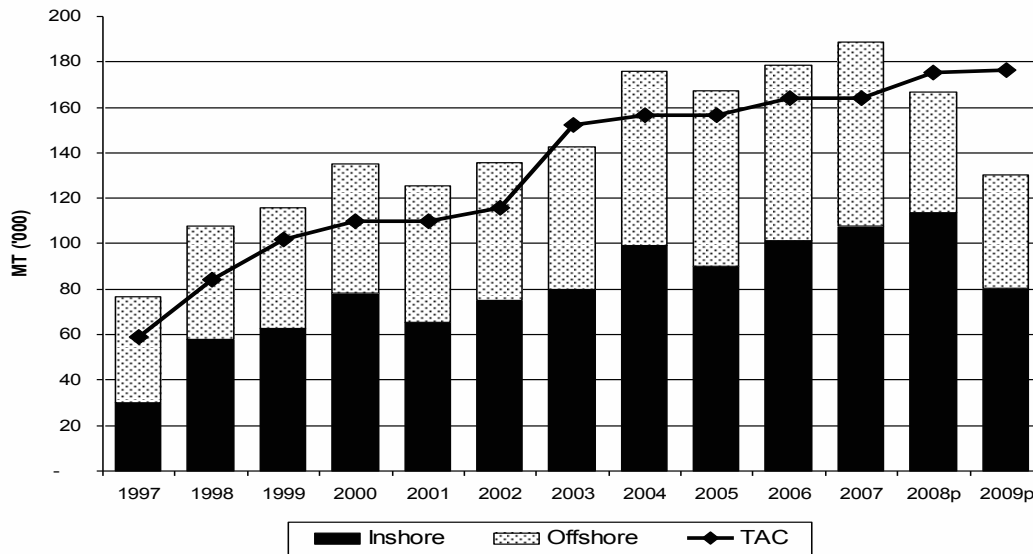


Figure 3: Canadian landings and total allowable catch of northern shrimp by fleet, 1997-2009 (Source: Department of Fisheries and Oceans, cited in Foley 2012).²

² 2008p and 2009p refers to preliminary data.

3.4 Objectives

The objective of the remainder of this report is to provide a detailed analysis of the impact of resource allocation policies on three relatively remote, shrimp dependent regions in Newfoundland and Labrador.

3.5 Rationale

While the offshore shrimp sector originally produced a high value product and the inshore owner-operator shrimp sector provided fishing communities in NL with an alternative to cod, and a supplement to crab, the industry has recently faced enormous challenges due to changing global markets for shrimp and increasing fishing costs (Gray and Sinclair 2005; Gardner Pinfold 2006; Mather and Joensen 2010). Shrimp harvesters and processors have been seriously affected by changes in exchange rates, competition from tropical farmed shrimp, and rising fuel and other costs. The recent downturn in the global economy has exacerbated the situation, as have recent quota cuts. The offshore sector has not been shielded from these economic challenges, and earnings have declined dramatically. Communities that experienced the trauma of the cod moratorium now face a new round of deep uncertainty with multiple shrimp plant closures seriously affecting workers and communities, particularly on the Bonavista and Great Northern Peninsulas. Recent stock assessments of Northern shrimp, particularly in Shrimp Fishing Area (SFA) 6, have fuelled on-going policy discussions about the future viability of the existing inshore shrimp fleet in Newfoundland and Labrador documented in the *Report of the Independent Chair of the Memorandum of Understanding Steering Committee to the Department of Fisheries and Aquaculture in Newfoundland and Labrador (MOU)*. Although the *MOU's* recommendations on shrimp and other fisheries harvested in Newfoundland and Labrador were not accepted by the provincial government, the analysis found that significant sections of the industry – both processing and harvesting – were economically nonviable. The recently released *MOU* on the province's fisheries is, in some ways, 'sensitive' to regional development dynamics. The report has, for example, identified *where* the most vulnerable shrimp fisheries in the province are. Yet the *MOU* fails to go beyond identifying vulnerable shrimp dependent regions and tends to focus on a narrow range of financial measures of viability that are abstracted from the reality of how men and women work and live in the industry; more specifically it fails to provide a policy solution to individuals and communities – the main focus of the proposed research. Echoing the crude and often misleading notion of 'too many fishermen chasing too few fish,' the *MOU* assumes that reducing the number of harvesters and processing plants is *the* solution to problems in the province's fisheries and overlooks alternative ways and means to improve fisheries policy and development outcomes. Our study also seeks to inform ongoing policy dialogues about rationalization and restructuring. However, it contrasts with the approach of the *MOU* report by providing clear examples of how fisheries policy has effectively enhanced regional development opportunities and outcomes, focusing on some successes rather than on the crises and failures that far too often dominate public discussions.

3.6 *Research methodology and approach*

The field research included key informant interviews carried out in St John's and in southeast Labrador, the Northern Peninsula and Fogo Island during roughly two week visits to each case study region. We started the interview research with the Fogo Island case study in February 2012. This was followed by field trips to St Anthony and southeast Labrador in March 2012. The fieldwork research on the three case studies was completed by April 2012.

54 individuals were interviewed – 17 on Fogo Island, 11 in the Northern Peninsula region, and 23 in southeast Labrador, as well as 3 in St. John's with some people key to the Labrador and Northern Peninsula case studies. All but 5 of the interviews were recorded using a digital audio recorder. Participants included harvesters, processing plant workers, management people at the key organizations and shrimp plants, town councillors, development organization workers, and several business representatives. Some interviews were as short as about 40 minutes, some longer than 2 hours, with an average about 1 hour.

The interviews were semi-structured and most were structured around two themes. One theme involved questions about the shrimp fishery itself, questions like why and how harvesters got involved in the shrimp fishery, what they did before the shrimp fishery, the challenges and costs of gearing up, questions about where they have trawled shrimp, where they landed and sold their shrimp, whether shrimp sizes has changed, how well they've been doing financially, etc. And for plant workers, for example, we asked questions about who worked at the plant, where most plant workers lived, how shrimp was processed, the challenges of processing shrimp, and changes in size of shrimp. The second theme involved questions related to regional development. These included questions about how important the shrimp fishery was to the region, to the local economy, and to people's livelihoods.

3.7 *Clearances*

Ethical clearance for this research was secured through Memorial University's Interdisciplinary Committee on Ethics in Human Research (ICEHR) (ICEHR 2012-258-AR).

4. RESULTS

In this section of the report we discuss the results of secondary data collection and fieldwork. Rather than discussing each of our case studies in turn, we have structured the document into six key themes that have emerged from the research.

4.1 *Allocating licenses and quota*

4.1.1 *The principle of adjacency*

Resource access, allocation, and sharing policies related to northern shrimp were partly influenced by the *principle of adjacency*, which is currently enshrined in the Integrated Fisheries Management Plan (IFMP) for northern shrimp. According to this principle, people and regions adjacent to shrimp stocks should have priority access to the resource.

The extension of Canadian jurisdiction to 200 nautical miles off its coasts in 1977 brought significant fish stocks under Canadian control. Federal and provincial governments and the fishing industry saw the extension of jurisdiction as a major opportunity for Canadian harvesting and processing sectors. In addition to bringing groundfish stocks such as cod under Canadian jurisdiction, the extension of Canadian sovereignty in 1977 brought significant populations of northern shrimp in the Davis Strait and off Labrador under Canadian government control. In 1977, the Canadian government sponsored exploratory fisheries through vessels owned by Fishery Products Limited of St. Anthony and it found what it estimated to be commercially viable quantities of northern shrimp within Canada's newly claimed territorial waters. The federal government subsequently announced plans to issue licenses for shrimp fishing and invited proposals from Canadians. In line with domestic expectations regarding development and employment opportunities associated with Canada's control over groundfish and other stocks, particularly for inshore processing of cod, the federal government indicated in its initial call for proposals that it would prioritize granting shrimp licenses to four categories of applicants: Canadians active in the fishery in 1977, individual fishermen where possible, fishing cooperatives with processing capacity, and corporations with processing capacity (Allain 2010).

In 1978 the Department of Fisheries and Oceans announced that the first 11 licences would be allocated to enterprises and organisations in Nova Scotia, New Brunswick, Quebec and Newfoundland and Labrador. The principle that people in coastal regions contiguous or adjacent to the resource ought to have priority in accessing the resource played a particularly important role in the allocation of shrimp licences to Newfoundland and Labrador. While two of the five licences for this province were allocated to Fishery Products International, three licences were allocated to cooperatives along the coast of Labrador, as this region was adjacent to the most productive shrimp stocks. The principle of adjacency played a role in subsequent licence allocations that happened through the mid-1980s, and it has been a central factor in community-based efforts to claim rights to shrimp resources. It played a role in all three cases under investigation here.

In **Labrador** it was Richard Cashin, president of the Fish, Food and Allied Workers Union (FFAW), who lobbied the Minister of Fisheries, Romeo LeBlanc, to allocate shrimp quotas to communities in that part of the province. LeBlanc was very receptive to this proposal. Although some of the offshore licences allocated in the late 1970s were given to private companies, LeBlanc had also insisted that four of the six licences in Nova Scotia, New Brunswick and Quebec be granted to cooperatives rather than to privately owned fishing enterprises. LeBlanc's decision to allocate licences to cooperatives was not surprising: he was well-known for supporting small scale harvesters and small coastal communities that were economically and socially dependent on the resource. By allocating licences to cooperatives, rather than to companies, he hoped to sustain small scale harvesters and remote coastal communities. In a House Speech in 1979 he was explicit about his philosophy for fish resource allocation:

The first interest that has to be considered – and as long as I am the minister the first interest that is considered – is the interest of the fishermen starting with those who live in the communities that are most isolated and whose mobility is most limited. It was in the name of the small coastal communities and the small fishermen who could not compete with the foreign fishing fleets that we argued successfully with the rest of the world that Canada should manage the 200-mile zone (cited in Griffiths 2011, 238).

Given LeBlanc's philosophy, Cashin was able to convince him to allocate three of the five licences committed to the province of Newfoundland and Labrador to communities in Labrador. He later played a pivotal role in setting up the Labrador Fishermen's Union Fishing Co-operative, which successfully secured two licences allocated in 1978.³

The **Northern Peninsula's** allocation was part of the extension of shrimp quotas to inshore fishermen from 1997. In April 1997 the Minister of Fisheries and Oceans announced a 3,000 tonne special allocation to communities from Big Brook to Goose Cove (Figure 1). Interview participants explained that the allocation came about in response to vigorous lobbying by local development organisations and by the FFAW. These organisations based much of their case for a shrimp quota on the principle of adjacency. The provincial government supported their case by pointing out that the allocation of quotas in Atlantic Canada had, in the recent past, been made according to this principle. People from various groups on the Northern Peninsula subsequently created the non-profit company, SABRI, to manage the shrimp quota with a mandate to administer the allocation on behalf and for the benefit of the communities from Big Brook to Goose Cove.

The effort to secure an allocation of shrimp on **Fogo Island** was also justified, in part, by the fact that other community-based organisations adjacent to shrimp stocks had been granted offshore shrimp licenses and special allocations (notably the LFUSC and, as the fishery expanded off the northeast coast of Newfoundland in the late 1990s, SABRI). The arguments for a community-based allocation were articulated at a meeting of the Standing Committee on Fisheries and Oceans held in 1998. At the meeting Cecil Godwin, the Chairman of the Fogo Island Co-op at the time, and Hugh St. Croix, general manager, pointed out that the livelihoods of harvesters and processors on the island depended on extending the work season, upgrading processing facilities, and accessing more raw materials. All of this could be achieved, they argued, through an

³ The Torngat Fish Producers' Cooperative secured the third shrimp licence allocated to communities in Labrador.

offshore shrimp allocation similar to those received by other community-based organisations in the past. The Fogo Island Co-op, Godwin argued,

is similar to other community-based businesses that now hold shrimp allocations, such as the Labrador Fishermen's Union Shrimp Company Limited, Torngat Fish Producers Society Limited, and the St. Anthony Basin Resource Corporation. Fogo Island is directly adjacent to area 6 of the northern shrimp fishery, and therefore should be given primary consideration in any new shrimp allocations.

Peter Stoffer, one of the members of the Standing Committee, seemed bewildered as to why the Fogo Island Co-op had not been granted an offshore allocation: “I guess my question is why haven’t you been given the resource? Why haven’t you been given this allocation? It just begs the question as to why.” Stoffer subsequently tabled a motion that the Chair of the Standing Committee write to the Minister of Fisheries and Oceans requesting that if the shrimp quota were to increase, Fogo Island should be granted a 3,000 tonne offshore quota. The Standing Committee agreed to the motion. In 2000, the Fogo Island Co-op received a special allocation of 1,000 tonnes of shrimp.

In all three of our cases, access to the shrimp fishery was largely justified on the basis of the principle of adjacency.

4.1.2 The ‘last in, first out’ principle

A second allocation criterion has important consequences for the duration of access to shrimp resources for two of our three cases, for inshore harvesters, and for other community-based allocations not the subject of the current study. As explained above, starting in 1997, access to shrimp quotas was expanded to include the inshore sector and to include some special allocations. The existing offshore license holders lobbied heavily against the proposed expansion of access to new entrants, considering the expansion a threat to their viability. However, a DFO analysis found that the 37,600 tonne quota (first reached in 1996) was sufficient to support economically sustainable operations of offshore licence holders. DFO agreed that this TAC would be guaranteed for the offshore license holders and agreed that allocations made above this threshold to other interests would be shared with the offshore licenses holders on a 90%-10% basis, respectively. Moreover, DFO designated allocations to new groups as temporary, providing further protection for the original 17 offshore license holders. Integrated Fisheries Management Plans for shrimp in the 2000s include the statement that any decreases in quota allocation will begin with newer entrants first, in what has become known as the ‘last-in, first-out’ principle and policy. While it was clear in the late 2000s that DFO had decided to protect a threshold of 37,600 tonnes and had decided that no permanent increase in harvesting capacity would be guaranteed for new entrants, no basis for revoking access was clearly defined by DFO until 2003 when the term ‘last in, first out’ was first included in the IFMP for northern shrimp. The ‘last in, first out’ principle was not identified as one of the principles in Minister Mifflin’s 1997 announcement and a recent DFO report found that the term ‘last in, first out’ principle was first introduced formally as a policy in the 2003 IFMP for shrimp with no evidence of substantive stakeholder consultation (DFO, 2012).

SABRI received its 3,000 tonne special allocation in 1997. This allocation was part of a 21,450mt increase to 59,050mt in the overall quota for shrimp for both offshore and inshore harvesters in that year. Although SABRI's allocation is more vulnerable to quota cuts than allocations to offshore license holders, who are protected by the 37,600 tonne threshold established by DFO in 1997, the TAC would have to be reduced significantly from its current level of between 130,000 and 160,000 tonnes before SABRI's quota would be affected by the 'last-in, first-out' principle because it was one of the first entities to acquire access in the late 1990s expansion of the northern shrimp fishery.

Fogo Island's 1,000 tonne allocation was granted more recently, in 2000, as part of an increase in the overall shrimp quota from 58,632 to 61,632 tonnes in that year. Other beneficiaries of this quota increase included inshore sector harvesters, the Innu Nation, and offshore license holders, each of which were granted an additional quota. These more recent allocations have proved to be more vulnerable to changes in stock assessments. In 2011, the Fogo Island Co-op's 1,000 tonne special allocation and the Innu Nation's 1,500 tonne allocation were removed through DFO's application of the 'last-in, first-out' principle to allocation decisions following resource assessments which found that the shrimp TAC ought to be reduced

Therefore, the size and security of the quotas differs considerably between the three case studies. The LFUSC quota is the largest and the most secure as they were given two of the original licences allocated in the late 1970s. The SABRI quota is the next largest at 3,000 tonnes and as it was allocated more recently (1997), it is relatively less secure than the LFUSC's allocation but more secure than that of the Fogo Co-op. The Fogo Co-op's special allocation was granted in 2000, it consisted of only 1,000 tonnes of northern shrimp, and they lost it in 2011.

4.2 Mandating regional development

The three organisations that were responsible for managing the shrimp quotas discussed above were established through local consultative processes that resulted in the development of organizational mandates with strong local developmental requirements. This section examines the processes that led to the establishment of the three organisations, and it discusses how each organisation is constituted in a way that mandates it to invest in initiatives that enhance community and regional development.

The Fish Food and Allied Workers Union, through its president Richard Cashin, played an important role in ensuring that communities in **Labrador** benefited from the process of allocating offshore shrimp licenses in the late 1970s. Cashin organised and chaired a meeting of interested parties in November 1978 at L'Anse au Loup to discuss how Labrador fishermen could apply for two shrimp licenses that DFO had allotted to southeast Labrador in the area from Cartwright to L'Anse au Clair, where fishermen were represented by the FFAW. A majority of those in attendance were small boat (speedboat) fishermen but people from the town council, regional development organizations and the general public attended as well. While Cashin explained options for accessing the licenses, such as establishing a cooperative along the lines of what existed on Fogo Island, interview participants told us that there was some debate about whether the licences should be held by individual fishermen or by an organisation that represented the collective interests of all fishermen. In the end the group agreed to establish a

cooperative for the purpose of applying for the offshore shrimp licenses. Several models were explored, with the relatively recent establishment of the Fogo Island Co-op off the northeast coast of Newfoundland playing a role in their thinking.

The group elected to form a cooperative called, at the time, the Labrador Fishermen's Union Fishing Co-operative (LFUFC). The group decided that the organization would apply for the two offshore shrimp licenses designated for the two southern regions of Labrador, one from L'Anse au Clair to Red Bay and one from Lodge Bay to Cartwright. A key issue for the new cooperative was defining its core mandate. To this end, the group elected a board of directors to represent coastal areas of Labrador and to invest profits from the licenses on their behalf and created a constitution which at its core was oriented towards community and regional development. The constitution of the organization states that "monies derived from the offshore shrimp licences would go into infrastructure along the coast to enhance the lives of individuals encompassing the whole region". Any *bona fide* fisherman within the region was entitled to become a member in the new cooperative. There were over 900 members in the beginning, the vast majority of whom were small boat fishers (under 35 foot).⁴ The original membership included many women, as a lot of women fished with their husbands in small boats at the time.

There have been minor changes to the organization's constitution over the years. In 1982, the cooperative's board of directors and members decided to cancel its registration as a cooperative and changed its legal status to a limited liability company. The name of the new company was the *Labrador Fishermen's Union Shrimp Company Limited* (LFUSCL). According to an interview participant closely involved in the establishment of the organization, the main reason for the change was that the board felt it was constrained by rules imposed by provincial legislation on cooperatives. He explained that the cooperative society had certain requirements on how to spend revenues, which included distributing revenues to members. But the Labrador group did not want to distribute profits to members because it wanted to invest revenues in inshore fishery infrastructure, particularly processing plants, as a way of providing both a local outlet for selling their catch and a means for generating employment opportunities. Despite the transition to a company, the mandate and core governance structure of the organization remained in place with individual members becoming shareholders of a new company operating on cooperative principles. Shareholders cannot receive any profits from the company and cannot sell shares outside the company; any revenues remain committed to regional development purposes.

On the **Northern Peninsula**, the policy of granting 3,000 tonnes of shrimp to "the communities from Big Brook to Goose Cove" led to considerable debate in the region over *who* would administer the special allocation. In addition, there was debate and discussion about *how* potential funds would be used, although using the funds to somehow get a fish processing plant back in the region was a shared goal of various groups. According to interview participants, there was debate about who would manage the quota and for what purpose because the Minister allocated the quota to "the communities from Big Brook to Goose Cove," rather than to a specific organisation. Rising Sun Developers, a local development organization, claimed it played an important role in securing the special allocation for the Northern Peninsula through its

⁴ One of the early leaders estimated that about 90 percent of shareholders were small boat fishers in the early years of the LFUSC. He estimated that currently about 15-20 percent of shareholders fish out of small boats (Interviews).

lobbying efforts and through its application for an allocation of shrimp. However, there was no harvester or plant worker representation on the board of Rising Sun Developers, and the FFAW was opposed to granting a significant allocation of fish resource to an organisation that did not have direct representation by fishers and plant workers. Rising Sun Developers proposed to establish a sub-committee of the organisation made up of groups directly involved in the fishery, but this was rejected by the FFAW and local fishing interests. The solution to this impasse involved establishing a new, not-for profit organisation that included different groups in the region and that was specifically tasked to administer the shrimp resource in the interests of the communities from Big Brook to Goose Cove on the Northern Peninsula. This new organisation was called the St Anthony Basin Resource Incorporated (SABRI), named after a fishing area adjacent to St. Anthony.

A management board was established for SABRI made up of volunteers from different organizations in the region. It includes fish harvesters, fish plant workers and a representative of the St. Anthony Town Council, as well as a representative of the local Chamber of Commerce, a Rising Sun Developers representative, and representatives of other communities from the region. So there is a mix of harvesters, plant workers, community representatives, and development representatives on the board. The organisation's mission is: "To administer a 3000 metric tonne allocation of Northern Shrimp on behalf of the communities from Big Brook to Goose Cove, in a manner resulting in expansion of the region's economic base and improved employment opportunities in harmony with a rural setting and lifestyle" (SABRI, n.d. <http://www.sabrinl.com/>).

Both the LFUSC and SABRI are therefore community-based, socio-economic organizations that were created in direct response to federal fisheries policies that allocated shrimp resources to designated regions in Newfoundland and Labrador based on the principle of adjacency and efforts to promote local employment through domestication and community development. In contrast, the Fogo Island Co-op did not originate from efforts to allocate shrimp licenses or quota and indeed existed prior to the development of the Canadian northern shrimp fishery. However, the creation of the Fogo Island Co-op in the late 1960s was in key respects part of a process of regional development. Following the departure of private fish merchants from the island, island residents defied a Federal-Provincial Resettlement Program encouraging families to relocate from isolated communities to economic centers and engaged instead in an inter-community revitalization process that led to the creation of the worker-owned enterprise that bears the island's name and a participatory development model known around the world as the Fogo Process (McCay, 1978, Carter 1984, McCay 1999). In the process, fish harvesters and residents were able to transcend deeply rooted inter-community and inter-religious tensions linked to about 10 distinct coastal communities. The Fogo Island Co-op has since provided a mechanism through which to unite the island's residents and communities, and undoubtedly facilitated the forging of an island-wide identity. In addition, the Fogo Island Co-op was discussed during the creation of the LFUSC in the late 1970s as an example of a potential organizational model that the harvesters in southeast Labrador could adopt to apply for and own new Canadian offshore shrimp licenses. In this way, the Fogo Island Co-op provided an important example of a community-based organisation that focused on the economic, social and cultural well-being of the region.

The three organizations from our case studies are different in constitution and in terms of their legal and institutional structure. Despite these differences, there are important things they have in common. First, all three organisations are broadly representative of their communities. They include both fishing interests and stakeholders not directly tied to shrimp and other commercially harvested fish species. Second, although the three organisations aim to operate profitably, they have also used their shrimp quotas and the resulting profits for social goals including job creation, fisheries diversification and community development.

4.3 Using shrimp quota for fisheries development and diversification

The three organisations initially used their licenses and allocations to generate income through royalties charged to companies with offshore vessels.

4.3.1 Generating revenues

Canadianization policies encouraged offshore shrimp license holders to transition into purchasing offshore vessels to catch their own shrimp, but early leaders of the LFUSC lobbied against certain aspects of the policies in order to preserve the opportunity to enter into charter and royalty arrangements with foreign and, latter, Canadian companies that owned factory freezer trawler vessels. For the LFUSC, investing in harvesting capacity at the outset was not seriously considered given the huge capital costs involved in buying a large offshore shrimp trawler and an immediate need to generate revenue for investing in inshore infrastructure. The LFUSC initially established a charter and royalty agreement with a Faroe Islands-based boat and a Danish company. In the first year, the LFUSC generated a profit of \$750,000 with very little expenses (LFUSC, n.d. <http://labshrimp.com/>). Our interview participants who recall these early years suggest that these arrangements were complex and not always successful. Yet over time, and with more experience, the LFUSC was able to negotiate financially productive and secure arrangement with private companies. By the early 1990s, the LFUSC had signed a long-term deal with a Nova Scotia based company. Besides committing to make royalty payments, the Nova Scotia company also agreed to employ people from the region on its boats.

In 1997, SABRI distributed parts of its 3,000 tonne quota to several offshore companies on a royalty basis and received about \$1.7 million in royalty fees for its 1997 allocation (SABRI, 1998). The following year, SABRI entered into a 15-year agreement with Clearwater Fine Foods, a large Nova Scotia based fishing company, after putting out a call for proposals. The main parts of the agreement were that Clearwater would harvest the quota in return for royalties, and it would partner with SABRI to establish a multi-species fish plant in St. Anthony. The conditions of the agreement also include employment of fishermen from the region on Clearwater's boats and landing a proportion of Clearwater's catch in St. Anthony. As one research participant informed us, "We tried to put in stipulation that to catch our shrimp, you had to take two fellows on a boat for a trip and that kind of stuff while you were catching it. We were very much aware of all this employment, right?" (25). In order to spread the benefits of this arrangement, SABRI committed itself to ensuring that the employment opportunities were shared evenly across the broader region. By 1999 there were 24 local fishermen working on three offshore factory freezer boats.

As noted earlier, the Fogo Island Co-op received a special allocation of 1,000 tonnes of shrimp in 2000. One of the Co-op's managers had considerable experience with the offshore shrimp sector and was able to secure a royalty agreement with Newfoundland Resources. The company was granted the first right of refusal to catch shrimp as long as the Co-op was satisfied with the returns and the royalty agreement. They signed an initial three-year agreement and this was later extended to 10 years. By 2002, the offshore allocation was providing the Co-op with around \$400,000 in annual return.

All three of the organisations appear to have established long term contracts with companies that owned offshore vessels in return for royalty payments, employment on boats and, in the case of SABRI, an investment in processing capacity. The LFUSC has also become more directly interested in investing in offshore vessels as their financial situation has improved. In 2009, for example, the LFUSC entered into a five-year lease agreement for a factory freezer trawler called the Labrador Storm, a 67 metre vessel built in the 1980s and previously owned by The Royal Greenland Company. The agreement involving the Labrador Storm ended prematurely, however, and the LFUSC subsequently bought a 50 per cent share in the Nova Scotia based M.V. Osprey, a company that operates the Northern Eagle through its own offshore shrimp licence.

4.3.2 Investing revenues

A key goal for all three organisations was to invest the funds generated from the royalties and rents from their allocations in initiatives to diversify the local fishing industry through harvesting new fish species and by developing new capacity in fish processing. The three organisations have made significant investments in processing, and have also successfully diversified their local industries. The remainder of this section of the report outlines how this was achieved in the three regions.

The LFUSC started investing in processing facilities from the early 1980s. In 1981 it acquired a fresh fish plant from Northern Fisheries Ltd in L'Anse au Loup. Northern Fisheries Ltd had filed for bankruptcy the year before leaving local fishermen and plant workers unpaid. The board of the LFUSC and members responded by using profits from the offshore shrimp licenses to take over the operation and pay off outstanding bills, including plant workers' wages, fishermen's bills, and money owed to small businesses. The company also hired two of the plant's top managers, who remain with the company (Snowadsky, 2005: 97). This initial investment played an important role in establishing the LFUSC's identity as an organisation that supported fishermen, plant workers, and communities in southeast Labrador. It had purchased a plant that not only supported plant workers, but also small boat fishermen, and their families in and around L'Anse au Loup. As one interview participant said, "The plant is doing everything possible to keep the small boat fishermen alive, and only because the way it's operated, and the plant is owned by the fishermen and the fishermen makes decisions" (Interviews).

During the 1980s and 1990s the LFUSC continued to use its royalties from shrimp licences to invest in processing facilities, in this way diversifying its economic base. It purchased a fish plant in Cartwright in the 1980s and subsequently turned it into a crab plant. The Cartwright plant is currently undergoing significant upgrading. The company's investments in crab

processing facilities also include a state-of-the-art facility in Mary's Harbour, which is scheduled for completion in 2013.

The LFUSC has also made significant investments in shrimp processing infrastructure. In the late 1990s, with the allocation of new quotas for inshore fishermen, the LFUSC began planning a shrimp processing plant in southern Labrador. A shrimp processing facility would provide a processing facility for its shareholders who were getting involved in the new, inshore shrimp fishery, it would create onshore employment in the region, and it might generate a profit. The LFUSC applied for, and was granted, a shrimp processing licence by the provincial government on the basis that it would generate jobs and provide an economic boost to communities in southeast Labrador. The decision was made to establish a plant at Charlottetown given its proximity to the shrimp resource and the availability of a workforce from the communities of Charlottetown and Port Hope Simpson.

Given the LFUSC's lack of experience in onshore shrimp processing and need for additional capital, the plant at Charlottetown was established through a joint venture with the Barry Group Inc., a Corner Brook based fish company that operated two shrimp plants in Newfoundland. The joint venture led to the establishment of Labrador Choice Seafoods Limited. The Barry Group Inc. provided expertise for managing the shrimp processing operation and for marketing shrimp, while LFUSC members supplied the plant with raw material. The joint venture did not, however, last and in 2007 the LFUSC bought out the Barry Group Inc.'s share and has since run the plant on its own, and profitably. The Charlottetown plant currently buys shrimp from around 20 vessels, about 15 of which are owned by LFUSC members. Each boat has a crew of between 4 and 5 people. One interview participant explained that the plant "takes care" of LFUSC shareholders first and then, if it has the capacity, can take shrimp from non-shareholders, such as vessels from the Northern Peninsula and the northeast coast of Newfoundland, who sometimes sell to the plant. All of the shrimp is landed at the plant, and none is trucked in. And the plant does not process any shrimp caught by offshore vessels, including its own quotas. Those shrimp are processed onboard and exported through different market channels than cooked and peeled shrimp. The plant cooks and peels between 10 and 11 million pounds of shrimp per year and engages a Danish company to market its shrimp in the UK and Europe.

We noted earlier that the royalty agreement between Clearwater and SABRI included a plan to establish a new multi-species processing plant in St Anthony. The plant was built in 1998 and in 1999, it employed 150 people with a capacity of 100,000 pounds of product per day with products shipped to markets in North America, Europe and Asia. The new plant was owned and operated by a new company called St. Anthony Seafoods Limited Partnership. The company was a limited partnership involving Clearwater, (50% of the shares), SABRI, (25%), and two Icelandic companies (25%), Basafell HF and Fislidusmlag Husavikur. Clearwater had years of marketing experience and a well-developed marketing infrastructure, which SABRI lacked. The Icelandic companies brought technical experience and expertise, as well as shrimp processing equipment from Iceland that was no longer being used.⁵ Over the longer term, the Icelandic contribution to the plant declined and they subsequently sold their 25 percent share in the company to Clearwater.

⁵ The Icelandic shrimp processing industry grew rapidly during the 1980s and early 1990s, but collapsed in the late 1990s.

In terms of support for fisheries development, SABRI's board has always looked at initiatives that could compliment the fishery, such as infrastructure requirements that businesses can utilize. For example, in 2011, SABRI partnered with the Port Authority in St. Anthony and purchased a lift costing \$80,000 that enabled the business community to service small boats. They followed that up by trying to get a ramp installed, which can also help the business community (Interviews). SABRI has also provided assistance to help small-boat fishermen get on the water through technology, gear, and service infrastructure (Interviews). In the late 1990s, SABRI worked with DFA and the Nordic Economic Development board on finding ways to support the sealing industry, and it also covered the costs of registration and travel for several fishermen who attended a sealing conference. In the late 1990s they supported the establishment of cod grow-out sites, and provided those interested in the sector with loans up to \$20,000. SABRI has supported efforts to diversify the industry through aquaculture, by supporting new mussel farms through loans to private companies, which could in turn be used as leverage for other provincial and regional funding, such as through the Atlantic Canada Opportunities Agency (ACOA).

Other than its investment in the processing plant and partnership with St. Anthony Seafood and various other fishery-related initiatives, SABRI's most significant investment was the establishment of a large cold storage facility in St Anthony. The facility was financed through an ACOA loan of \$3 million and a \$4.5 million contribution by SABRI. Establishing a cold storage facility had been SABRI's goal for some time as it would allow St Anthony to be a port of call for offshore vessels fishing for shrimp and turbot. The cold storage facility was opened in November 2004, but construction continued through 2005. During most of the late 2000s the cold storage facility averaged around 30,000 human hours of work for members of the local community. Clearwater is an important customer for the cold storage facility, but it has also attracted reefer vessels en route to Denmark and Russia, and container boats en route to Europe. For example, since 2005 the facility has been used by the Icelandic company Eimskip, and has as a result turned St Anthony into Newfoundland's second international container port.

There are considerable advantages to having a cold storage facility, particularly in relation to overseas markets. In most cases, shrimp is shipped to Europe and then it sits in cold storage until buyers are ready to take it. This incurs costs for the industry. Access to the new cold storage facility, as one interview participant noted, makes it possible to secure advantages in marketing:

with the cold storage facility...you can handle your capacity, you can store it all here. You don't have to ship it over to your market, over in Europe and it's sitting in some storage over there, and the marketplace, seeing all this volume you got over there, it's just sitting there, and then they can decide well, boys, they're sweating, so we'll give them this price and they might have to sell. But if it's all sitting over here and they got none over there, and the markets over there are wondering if they are gonna get it, then they're gonna be saying well, boy, we should get, we should be paying for this because we don't know how much is out there.

SABRI has recently started looking more closely at the potential of extending the season for plant workers through frozen 'industrial shrimp,' a term that refers to small shrimp caught by offshore vessels and often exported for processing in Europe, but occasionally processed in Canada. The plant could use industrial shrimp at the beginning of the season when there are fewer inshore boats fishing shrimp. This could maximize the employment opportunities for workers in the two main shifts early in the season before the wet shrimp fishery picks up. When

the wet fishery slows down in terms of volume later in the season, the plant could then start to process the frozen industrial shrimp again. The result would be a more steady supply for the plant throughout the season, providing longer-term work. With the cold storage facility, you can store both the industrial shrimp and the processed cooked and peeled product. One interview participant explained that this could be a way to provide a five-day work week in all of Newfoundland and Labrador's shrimp plants. Another related approach would be to have inshore vessels freeze the product at sea, which would reduce the processing panic that forces them to put on three shifts.

The Fogo Island Co-op's efforts to secure a shrimp processing licence – and build a shrimp plant – were consistent with its ongoing strategy of diversification but also driven by a new dilemma that the expanding inshore shrimp fishery posed: its members who had geared up for harvesting shrimp were facing the prospect of having to sell their product elsewhere. The need to establish a shrimp processing plant gave new impetus to the Co-op's ongoing attempts to gain access to an offshore shrimp allocation from the federal government.⁶ In the late 1990s, the Co-op began lobbying for a shrimp allocation in part as a way to provide the funds needed to capitalise a shrimp plant, upgrade its crab plant, and diversify into other fisheries. In focusing on the role that royalties could play in supporting an onshore shrimp processing facility, the Co-op was drawing on the prior experience of the LFUSC and SABRI. Co-op leaders were aware of the LFUSC's offshore licences, and, more importantly, they knew that SABRI had received a special allocation as part of the 1997 expansion as shrimp became abundant off the northeast coast of Newfoundland. They also knew that SABRI was using royalties acquired from firms catching the special allocation to develop a shrimp processing plant in the region. By 2000 the Co-op had succeeded on both fronts – it had secured a licence to process shrimp from the provincial government and it was granted a special allocation of 1,000 tonnes of shrimp by the federal government.

When the processing licence was granted, the Co-op faced challenges associated with what was to them, a new fish species. Specifically, the Co-op lacked experience in shrimp processing and did not have the market contacts that would facilitate the export of processed product. Financial institutions recognised this problem and were reluctant to finance the Co-op to construct a new processing facility. Although the Co-op was approached by Newfoundland-based interests, representatives of the organisation also travelled to Iceland to talk to companies that might be interested in a joint venture to process and market shrimp.

The Co-op established a joint venture with several Icelandic companies, which led to the establishment of a new company called Fogo Island Shrimp Incorporated.⁷ Rather than buy new equipment for the Fogo Island plant, the Icelandic companies offered to ship their idle shrimp processing equipment to Fogo Island as their investment in the new processing facility established in Seldom. The Co-op contributed the wharf, the building, tractor trailers, other infrastructure, and the raw material supply as assets while the Icelanders contributed plant technology, processing equipment, and a manager who was sent over to operate the plant once it opened. And in short order, as one interview participant put it, “we had really good production”.

⁶ One of our interview participants explained that the Co-op unsuccessfully sought and applied for an offshore shrimp license in the 1980s.

⁷ Plants in Iceland were closing due to a lack of local raw material.

The Co-op has since replaced much of the equipment that came from Iceland. By the late 2000s the Co-op had invested in a new peeler, a new cooker, a new grader, a new after freezer, new lasers, a new engine room, a new chill water system, and expanded cold storage. Overall the Co-op invested over four million dollars in its shrimp plant from 2008-2012. These investments were made just prior to a recent set of quota cuts. With increased capacity and improved efficiencies, the Co-op recently began to face a shortage of raw material. Improving access to resources and supply for the shrimp plant has become a priority and ongoing focus, according to interview participants.

The three organisations in our case study followed similar strategies in relation to how they used their access to the northern shrimp resource. Rather than investing in an offshore vessel, the organisations allowed private companies to catch their quota in return for royalties. This practice started out as a transitional stop gap measure for new offshore license holders like the LFUSC during the Canadianization phase of the northern shrimp fishery in the late 1970s and 1980s, but continued and emerged as an explicit development strategy in SABRI, the Fogo Island Co-op and other community-based groups that received special allocations from 1997 onwards. These funds were then used to diversify local fisheries, create jobs for fishermen on offshore vessels and plant workers and to invest in upgrading and new infrastructure. These investments were particularly important for the survival of the inshore fishery and other businesses in these regions in the wake of the groundfish moratoria of the early 1990s.

4.4 Processing shrimp and harvester-processor relations

All three regions became involved in inshore shrimp processing after 1997. Entering the cooked and peeled shrimp market involved a steep learning curve, and our interview participants discussed the challenges of processing and marketing what was for them an entirely new commodity. There were challenges in terms of finding international buyers, and harvesters and processors initially had difficulties meeting the quality standards of these buyers. The market conditions for cooked and peeled shrimp were also difficult in the period immediately after the expansion of the inshore. Part of the reason for this was that NL production quickly oversupplied the international cooked and peeled market. By 2001 market conditions were so bad that the industry decided to shut down for the season. Although the shrimp industry has managed to come to terms with the quality demands of this new market, and the challenges associated with supply, market conditions continue to be challenging.

Harvester – processor relations have sometimes been difficult and conflict over prices led to delays in the start of the season in several years between 2001 and 2009. There have been regular and intense struggles, despite the existence of a price-setting panel. The strike led by shrimp processors in the 2009 season was resolved when the FFAW, the Association of Seafood Producers (ASP), and the Government of Newfoundland and Labrador signed a Memorandum of Understanding (MOU), which had a mandate to provide analysis to inform the debate on rationalization and restructuring initiatives designed to enhance the long term viability of the province's fishing industry with a particular focus on the shrimp fishery. The MOU report painted a bleak picture of the economic performance of the province's shrimp and other inshore

fisheries and recommended a radical reduction in the number of inshore owner-operators and processing plants (Clift 2011).

Interestingly, at the time of our interviews, one year after the publication of the report of the Independent Chair of the MOU Steering Committee, shrimp markets and prices were at historic highs. While the minimum price for shrimp was set at 42 cents per pound following the 2009 harvester-processor dispute that initiated the MOU process, harvesters were typically receiving over 90 cents per pound for shrimp in 2011 as the MOU Steering Committee conducted its report. Moreover, in each region, shrimp processing plant representatives reported that they were performing well financially following years of uncertainty during the early to mid-2000s, while harvesters generally reported that the shrimp fishery was becoming the backbone of their multi-species operations. The healthy economic reports from interview participants suggest that the radical restructuring called for in the MOU report perhaps relied too heavily on data from particularly poor seasons. An unexpected finding from interviews was the general positivity about the state of the shrimp fishery, in contrast to the ongoing talk of crisis in some media, industry and policy circles.

Although international markets and harvester-processor price disputes are high profile issues in the shrimp industry, in this section of the report we explore two other key structural issues relating to the development of the inshore shrimp industry in each region. First, we examine how the technological demands of this new fishery led to significant investments by inshore shrimp harvesters, a shift that was encouraged by the industry's processing sector. Second, and related to the first point, we explore the significance of shrimp processing in the context of other fisheries, particularly crab.

4.4.1 Gearing up for the inshore shrimp fishery

Sourcing shrimp for the new processing facilities in our three case study regions depended almost exclusively on an inshore shrimp fleet that was established in the late 1990s. For harvesters who had previously fished for cod, other groundfish, and/or crab, gearing up for shrimp trawling required considerable investment in new equipment, which often consisted of newer and bigger fishing vessels. The DFO policy for determining access was that if harvesters geared up and passed an inspection, they would be granted a permit for shrimp. According to one interview participant, DFO expected that the new fleet would be around 150 boats, but the number of licences allocated exceeded 350 by the mid-2000s, reflecting the large number of fishermen who invested in this fishery.

Transitioning to shrimp from groundfish and crab is not a straightforward process. Shrimp harvesting requires larger vessels with more powerful engines needed to tow trawls. The gear is also different and harvesters needed to invest significant amounts in doors, winches, wire, hydraulics, as well as trawls. New shrimp harvesters also had to come to terms with longer fishing trips and new harvesting techniques. As one of our research participants told us,

I mean it was a major change because it was totally different from any fishery we were in. We [were] used to fixed gear or purse seine gill netting, which didn't take a lot of infrastructure; but when you start out with shrimp you got to get these big winches. You got to get different hydraulics. You had to get, you know...your boat had to be geared up for it in terms of strength.

Harvesters also found that the financial management of a shrimp operation was fundamentally different. In addition to the significant start-up costs, owners quickly learned that participating in the shrimp fishery entailed large operational and maintenance costs. One harvester estimated that he was spending 25% of his harvesting costs on fuel. Another harvester estimated that he was using upwards of 100,000 litres of gasoline per boat per year. Repairs and maintenance costs were also far higher because of the greater wear and tear associated with shrimp trawling and because they were using larger vessels with greater horsepower. With greater capital investment, insurance costs had also gone up significantly. The higher capital and running costs associated with the shrimp fishery had implications for the financial 'model' of shrimp harvesters. As one harvester explained, for the shrimp fishery, "you need to be turning over big dollars...People look at you and say, 'Well, you know, you...geez, you got all this shrimp and you're making a fortune.' Well, that's fine. Yeah, your revenue may be coming in; but to sustain these boats you need to turn over a lot of money".

There were efforts to involve smaller boats in the shrimp fishery, particularly those vessels that were less than 45 feet in length. The provincial government became involved in attempts to develop technology that was suitable for smaller boats, including beam trawls that could be towed by less powerful boats. Interview participants described how beam trawls were attractive because they require less capital investment and use less fuel compared to the standard otter trawl. The province also tried to transfer shrimp pot technology from Europe, and they engaged university experts and hired consultants to advise on how to open up the shrimp fishery to smaller boat owners. Despite these efforts, the federal government decided that the shrimp fishery would be limited to vessels in the 45-65 foot range. Many of the harvesters who geared up for the shrimp fishery therefore had to make substantial capital investments in boats and gear.

Where did harvesters secure funding for upgrading their vessels to meet the requirements of the new inshore shrimp fishery? Although some harvesters were able to secure funding from formal financial institutions, many others were supported by processing companies who helped fishermen gear up and buy boats as a way of securing access to raw material. As one harvester put it: "I mean, the companies were the ones that encouraged us. I didn't have...I never had no more interest in getting into the shrimp than...I had in getting a ticket to go to the moon because I didn't have anything to fish it in, really. I was only in a small boat, I mean, you know". Norman Cull was a fish harvester, former vice chair of SABRI, and former member of the Northern Shrimp Advisory Committee from 1997 to 2003. His comments at the Standing Committee on Fisheries and Oceans provide some key insights into the role that processors played in encouraging inshore shrimp harvesting and helping harvesters gear up:

In 1997, after some lobbying by fishermen, me included, we were successful in getting a shrimp allocation known as northern shrimp. There were several meetings and seminars held throughout the province, in which some of you probably were involved, asking fishermen to gear up for what we called, or what was called then, the gold mine of the north. I can well remember – because I had no intentions, and probably a lot of other fishermen out there didn't have any intentions of ever gearing up for shrimp or anything like that – that we were approached by processors saying, "Boys, you're going to have to gear up for the shrimp because it's out there by the scores (Cull, 2006).

One harvester interviewee discussed the advantages of entering into an informal relationship with a processing company as opposed to securing a loan from a bank:

The way it is with a bank – if you don't make it, you don't make it, and they don't care - I mean, they're going to have their money; but with a company... if you're with a company, all they wants is your product and they don't... you know, if you make a bad summer, they don't care. They'll just... you know, you pay what you can and that's it. So I was much better off when I was with the company...I felt that I was better off when I was with [processing company]. They treated me like a king as far as I was concerned.

4.4.2 *Interdependencies between shrimp and crab fisheries*

As the above quote suggests, harvesters who were assisted by processors to upgrade were in turn expected to deliver their raw material to them. However, this was not the only issue that affected the supply of raw material to processing facilities. New inshore shrimp fishermen often also had a licence for crab. Indeed, it seems that harvesters who upgraded to shrimp needed to be involved in both fisheries to make ends meet. As one of our research participants argued, “See, if you never had a crab license and you only had a bit of shrimp to catch, you weren't very prosperous either right. You know, getting enough money to get your boat, and all that kind of thing, you know”. Given the competition between processors over raw material, harvesters with both licenses often negotiated terms with processors. As one research participant told us, harvesters would say to processors: “if I sell you crab, what can you do for me on shrimp?”.

For processors, this relationship between crab and shrimp meant that it was in their interests to secure a processing license for both shellfish species if they were to reduce the risk of losing access to product to other processors. There was considerable competition for raw material between shrimp processors, and so being able to take both crab and shrimp from harvesters gave some processors a competitive advantage. For processors with only one license, the opposite was true. When the shrimp plant was constructed in St Anthony, SABRI estimated that the facility would require 8 million pounds of shrimp to break even. The plant was located directly adjacent to the northern portion of Shrimp Fishing Area 6, where the bulk of the shrimp stocks were located in the assessments and where much of the inshore fleet was catching shrimp in the early years of expansion. Yet they faced the disadvantage of not having a crab processing license, which according to our research participants was a key factor constraining the plant's ability to attract inshore harvesters. In addition, many of the boats around the Northern Peninsula had already been tied up by other processors through the informal arrangements described above by the time the plant was constructed and ready to process shrimp. SABRI was eventually able to secure sufficient raw material, in part through their successful application for a crab processing licence in 2005. At the time of our interviews, the St Anthony facility was processing around 14 million pounds of shrimp a year.

Another way of securing shrimp and crab in a context of competition involves paying bonuses to boat skippers, a practice that is often used to attract harvesters with larger inshore boats. Our research suggests that the LFUSC was not involved in such practices, although they do give bonuses over and above the agreed upon price depending on market conditions. One of our research participants made the point that in contrast to some private companies, the LFUSC provided bonuses to the entire crew and not just the skipper. The Fogo Island Co-op's approach to bonuses is also more complex than is the case for private processing companies. Indeed, the Co-op's mandate does not allow it to treat members differently by offering bonuses to harvesters with large quotas. As this interviewee suggested, however, maintaining the spirit of a cooperative

is sometimes difficult in the context of a competitive fishery where access to raw material is so critical:

I think the Co-op is... it's a type of organization that everybody is equal partner in the business....If I went out to a fish processor and I say, "I have a half million pounds of shrimp or 600"... or "crab and we got 2,000,000 pounds of shrimp," that guy as a processor is going to say, "Well, I can pay you 'x' amount of dollars because you're valuable to me because you have quantity." You go to the Co-op. The Co-op pays the best price it can, I mean... and it is the social... it's the backbone. The financial backbone of the economy of Fogo Island is the Co-op, and it's good, but they had to pay a fixed price, and it's been times in the past that we could have made a decision, and it's been a very, you know... even last spring, a very... it's been a very difficult decision. Do you support your community, support your schools that your kids go to...and all this filters right back to the Co-op as an economic drive for the island. Do you support the Co-op or do you... some guy come along and say, "Oh yeah, I'm going to give you an extra 20 cents a pound." So you get your extra 20 cents a pound on 500,000 pounds. Well I mean that's a 100 grand, right?

The Fogo Island Co-op did help some of its members upgrade their vessels for the new inshore shrimp fishery as a way of supporting them and ensuring a supply of raw material to the planned shrimp plant in Seldom. However, the Co-op's problem with the new inshore shrimp industry was somewhat different than that of SABRI in that they had the infrastructure to process crab, but did not initially have a license to process shrimp. As we noted earlier in the report, there was significant urgency in their efforts to secure a shrimp processing licence from the provincial government as they faced the possibility of losing crab harvesters to processors with both shrimp and crab facilities:

We got fishermen here that, you know, big time crab fishermen saying, ah, I got a shrimp license, but I can't sell me shrimp here. So I got to go somewhere else to sell my shrimp. Do you know what they're [other companies] telling us? For you to sell your shrimp, I want your crab. So, very, very awful, awkward position that put us in. (Interviews)

In the Fogo Island's Co-op's case, the risk was great that they would lose harvesters with large boats and large crab quotas to off-island companies:

So all of a sudden, we're looking at...like five or six big boats at the time had 250,000-pound quotas of crab, the full-timers. They would possibly be going somewhere else with their shrimp and taking the crab with them...So we were faced with a dilemma on how we're going to proceed with this. We got to get in the shrimp, people, and see if we can...so we can do our fishermen's shrimp and recoup money if we loaned them money to help them out, plus keep the crab and that they got to sell because the crab is the mainstay of the business. So that was three or four years, I think, of the roughest time, I think, that was ever put in around [the Co-op's] board table...(Interviews).

The Co-op's effort in securing a shrimp licence was therefore tied closely to the sustainability of their crab operation. Without a shrimp processing licence it is difficult to see how the Co-op would have been able to maintain access to sufficient raw material for its crab processing plant.

All three of the organisations in our study became involved in shrimp processing following the development of the new inshore shrimp fishery. Their approach was similar: they used royalties from their offshore allocation to invest in processing capacity. But processing capacity on its own was not enough given the interdependency between inshore shrimp and crab harvesting/processing. In practice, the successful diversification into shrimp processing by the three organisations in our case study regions depended greatly on having an offshore allocation *and* processing licences for *both* crab and shrimp. While the harvesting licences for shrimp are allocated through the federal Department of Fisheries and Oceans, processing licences are allocated through the provincial government. The way in which harvesting happens in practice, accessing shrimp processing licenses, and the trade relationships between harvesters and processors, were thus key issues for the three organisations in our case study. This suggests that the allocation of a quota is important for ensuring that it will be utilized successfully for economic gain and regional development, which in these cases primarily involves the wealth and employment generated from the landing and processing of shrimp within the region. However, economic development benefits derived from community-based quotas in the three regions also depended on the ability of the organizations holding the quota to invest in the technical infrastructure for processing and on their related ability to influence various harvester-processor trade relationships that could constrain or enhance the flow of economic benefits into a region.

4.5 *Investing in regional and community development initiatives outside the fishery*

The three organisations with ties to the inshore fishery that were allocated access to northern shrimp quotas were – and continue to be – committed to regional economic diversification and community development beyond the fishery. In other words, even though the royalties were generated through fish resource allocations, the organisations in question also invested in non-fisheries based economic activities. As we noted earlier in the report, the constitution of the LFUSC commits it to using the funds generated from two offshore shrimp licences for the benefit of all individuals in the region, and not just to those involved directly in the company or even in fish harvesting and processing. Similarly, when SABRI was established it agreed on a mission statement that ensured that the shrimp quota would be used to the benefit of communities on the northern tip of the Northern Peninsula. The Fogo Island Co-op was established before it was allocated a shrimp quota, but it has always represented the interests of the communities on Fogo Island. In this section of the report we provide some evidence of the ways in which these organisations have used the quota to diversify their economic base, invest in infrastructure for job creation and development, and invest in resources for their respective local communities. The key point is that royalties generated from fisheries resource allocations were used to support economic activities beyond the fish sector.

One of the LFUSC's most important contributions to regional development was the role it played in establishing the Eagle River Credit Union. In January 1984, the Bank of Montreal announced it was moving its sub-branch services and all accounts from L'Anse au Loup, where the bank had operated since 1978, to Deer Lake. Local leaders, who were unsuccessful in an initial attempt to get the bank to stay, began to explore alternatives. At a meeting of the LFUSC in L'Anse au Clair, a proposal was made to set up a 'closed-bond' credit union for its fishermen/shareholders. However, since the closing of the bank affected many people and businesses across the region, the decision was made to establish an 'open bond' credit union that

would allow all citizens in the region to participate. They agreed to name the credit union the Eagle River Credit Union and that the area to be served by the Credit Union would be from Cartwright to L'Anse au Clair. To this end, the LFUSC invested \$100,000 to get the credit union up and running, \$13,000 towards the manager's salary for one year, and a \$7,000 contribution for travel expenses for the credit union staff (Interviews; Snowadsky, 2005: 104). The public was invited to a meeting to select an interim board of directors and in June 1984, the Eagle River Credit Union was created (Snowadsky, 2005: 104).

The credit union offers financial services to the region, providing loans to its members for home construction and renovation, vehicles, small businesses, and a loan program designed for fishermen (Snowadsky, 2005: 105). The credit union subsequently expanded into other communities through six branches: in L'Anse au Loup, Mary's Harbour, Cartwright, St. Anthony, Port Saunders and Happy Valley - Goose Bay. It has received numerous awards, including a Community Economic Development Award for Excellence in Partnerships from the provincial Department of Industry, Trade and Rural Development in 2002, and an award for Community Economic Development from the Credit Union central of Canada in 2003 (Snowadsky, 2005: 105).

The LFUSC has been a strong supporter of sports, education, and culture in the region. It makes regular donations to sporting events and tournaments. Their efforts have included fundraising for the Recreation Committee to pay for upgrades to the Raymond C. Rumbolt Recreation Centre. In 1998, LFUSC announced two scholarships at Memorial University. Labrador students entering first-year studies at Memorial University now benefit from a contribution to *The Opportunity Fund* by the Labrador Fishermen's Union Shrimp Company Limited. The company created the Labrador Fishermen's Union Shrimp Company Memorial Scholarships. Valued at \$2,500 each, the two scholarships are awarded annually to entrance students in the coastal Labrador region from L'Anse au Clair to Paradise River (one for Lodge Bay north, and one for south of Lodge Bay). The scholarships commemorate six crew members of an offshore shrimp vessel who died in a plane crash in Greenland on September 11, 1990 (MUN, 1998). The company and its staff have been key supporters of other cultural events such as the Bakeapple Festival (Snowadsky, 2005: 100), the crab festival in Mary's Harbour, and shrimp festivals in Charlottetown.

While SABRI has played a significant role in sustaining the economic fabric of the region through fisheries diversification, it has also invested significant funds in business and community development on the Northern Peninsula. By 2010, SABRI had invested more than \$15.7 million in infrastructure in the region (in fishery and non-fishery development activities), awarded over \$190,000 in scholarship to students from the area, invested \$500,000 in community development in the region, donated more than \$194,000 to different groups in the region, and with its private sector partner created employment for more than 225 individuals from the area which contributed more than \$3 million in payroll to residents in the region. This includes investments in: a community grant programme to assist in the development of community projects; support for the Grenfell Foundation, which is a not for profit organisation aimed at sourcing funds for local hospitals and clinics; various business development initiatives; support for sport and recreation, and youth and education; support for various tourism development programmes; funding an oral history project; and support for conservation efforts.

The Fogo Island Co-op has always been involved in supporting community initiatives and has made donations to hospitals, to minor hockey, and has recently developed a new soccer field. It tends to support local initiatives on a case-by-case basis, similar to how the LFUSC operates. At the same time, it has also played a crucial role in assisting different communities in their efforts to gain access to public services such as water and sewerage.

4.6 *Models of regional development*

Section 4.2 above examined how people in each region created mandates for each organization to enhance community and regional development. A key theme in our interviews was participants' perceptions of the differences between the way their organisation operates and the way most private companies operate in the Newfoundland and Labrador fishery. In each case, our research participants argued that their organizations made business decisions that emphasised job creation and regional economic stability. Although profit remained an important overall goal for these organisations, participants explained that the community-based organizations were not driven in the same way as private companies to make very large profits, which in turn allowed them to make investments that did not always make money from the outset. In other words, investment and production decisions were guided by the long-term priority of community economic stability rather than the short-term goal of profit generation. In this section of the report we provide details from our three case studies that emphasize the ongoing significance of the community-oriented mandate of each organization. People in each region have a strong sense that the organizations represent valuable and practical 'models' of community development.

One interviewee explained the importance of 'the model' of allocations that made long-term stability possible in each region:

Well, I think what we did with the shrimp, is... a model of what you do if something changes in the future, shrimp is gone, somebody else is there, at least there is a model, and some recognition, and thanks be to god they prove themselves, the regional things, like the Fogo Island's, the St. Anthony's, and the Labrador, those areas have done well with what they were given. But that model, there's a lot of people probably looking at that kind of a thing for regions, as opposed to an independent operator, who can pull up and gone like that. (Interviews).

The LFUSC demonstrated its commitment to community economic stability shortly after it received its offshore shrimp quota when it bought a bankrupt fresh fish operation from Northern Fisheries Ltd. in Lanse-au-Loup. This purchase was followed by investments in plants in Cartwright and Mary's Harbour, as well as other small landing facilities along the coast, and in the shrimp processing plant in Charlottetown in 2000. Participants explained how, if viewed in isolation, these operations have sometimes lost money and might be considered unviable. However, with investments injected from more lucrative arms of the company and recognizing the ups and downs that are typical of the processing industry, the LFUSC has continued to operate processing plants that keep harvesters in the region, provide employment for plant workers and, in turn, generate significant spinoffs for the economy of the Labrador coast. Participants explained that private companies would not likely make the kinds of investments and long-term commitments that the LFUSC has in the region. It may not be that these

operations are always losing money, but that they may not make what are considered ‘normal’⁸ business margins. For example, a local business owner explained that the LFUSC is willing to invest a million dollars to make 10,000, whereas he would only invest a million if he would make \$100,000 or \$200,000. A shareholder in the LFUSC explained that, “The [LFUSC] is more concerned about the plant workers and their fishermen. If they can break even, they’ll accept a few years of just breaking even” . In other words, economic decisions are sometimes based on a different understanding of profit and viability than mainstream notions of ‘normal’ business margins, which often require relatively significant profits.

Our research participants on the Northern Peninsula maintained that SABRI also makes sound and innovative business decisions in ways that nevertheless prioritise local economic interests. SABRI, as one interview participant told us, is a *social enterprise*:

We are a social enterprise...I mean that’s what we’re really about, right? I mean there’s no point of us having a big fat bank account, nothing going on in the region. That doesn’t do anything, right? So we got to invest it in, in economic benefits for the region that people can capitalize on and people can say that they can stay here and work and get meaningful employment.

Notably, we interviewed people just months after Ocean Choice International (OCI) had decided to close its yellowtail processing facility in the Marystown plant and to step up its lobbying efforts to gain an exemption from the provincial government’s minimum processing requirements so it could export the product unprocessed. One interview participant used these events to illustrate the benefits of what he called the ‘SABRI model’. The model, he argued, is

amazing because the region owns the allocation, so then, you know, they utilize that allocation in the best interest of the region. Just, just take for example, now, I, we hear the story of Marystown, right, and, and OCI got that big quota down there. If that quota was tied to the community, to the community, region down there had the quota, even though they had it leased to OCI like we do with ours, with our shrimp right, you know, then the company could come with a proposal saying look, you know, we can’t do that anymore what we’re doing but we can give you this value for it because, you know, you guys own it, so I can pay you a royalty for it. Now, so I can take this and go make money somewhere else...They don’t just walk away with our quota and gone. We own it, right? The region up there owns it. (Interviews).

Our interviews on Fogo Island suggest that the Co-op’s approach is to focus on economic diversification and a more ‘holistic’ approach to economic viability, similar to LFUSC in Labrador. When we asked about the importance of shrimp relative to the Co-op’s other operations, such as crab, several respondents stressed the organisation’s holistic approach and diversification strategy. That is, in some years, shrimp might do poorly, while crab does well. In some years cod does poorly, while turbot does well. The strategy of diversification has allowed the company to manage the changing market conditions for different fish species with minimal disruption to harvesters and workers in processing plants.

⁸ The idea of what a constitutes a normal or acceptable profit margin was a prominent feature of the analysis used in the MOU report, which identified 15% gross margins as a target in line with the average performance of the Canadian seafood processing sector (Clift, 2011).

Bernadette Dwyer, an individual who has contributed significantly to the work of the Fogo Co-op, provided a detailed description of the principle of holism at a meeting of the Standing Committee on Fisheries and Oceans in 2002. She was responding to a question by Loyola Hearn who was asking whether the inshore shrimp operation was viable. Hearn framed his question in the context of the “many arguments that the only profitable shrimp fishery is the northern [offshore] one--the producer trawler, quickly frozen, into the market, quality product--whereas the inshore shrimp fishery is marginal at best, and may not be viable, depending on markets and tariffs.” Hearn asked the question: “How are you finding this in Fogo?” This was Dwyer’s response:

First of all, I have to get back to the structure of our organization to point out that we manage our operation in a holistic way. We look at all species that are available to us. We try to identify the best opportunities in the marketplace and the best utilization. Therefore, shrimp is one part of our operations, crab is one part, groundfish is one part, and pelagic species is one part. We will continue to make all aspects of our business profitable. On some occasions, one is more profitable than the other. We have found, through our 35 years, our diversity has helped us succeed. There have been years when the price of turbot was down and capelin carried the day, and years when the price of shrimp was down and crab carried the day... As I said, one year it's up, the next year it's down. That's the way we look at our shrimp, crab, groundfish, and pelagic fish operations, and all other aspects of our business. (Dwyer, 2002).

Although the three organisations articulate their approaches to regional economic development in slightly different ways, there are common features to how the LFUSC, SABRI and the Fogo Island Co-op have used their access to regional/community-based quotas for economic development. First, the three organisations share a common goal of investing in ways that maximize local economic impacts in terms of employment and diversification. Their emphasis is on long term sustainability, rather than short term profits. As we noted earlier, this is not to suggest that profits are not important; rather the organisations are prepared to be patient with their investments, even if the profits are smaller or take longer to be realised. Second, they have focused their investments on sections of the local fish sector that are often marginalised through global economic processes. Specifically, they have made investments to support the activities of smaller scale harvesters in remote regions. Finally, all three of the organisations define their economic interests in ways that emphasize overall economic sustainability. This principle was best articulated through the Fogo Island principle of ‘holism’, but it was also practiced by the LFUSC and SABRI. In these ways, the three organizations and their investments have a strong social component to them.

4.7 Conclusions and policy implications

The northern shrimp resource is extremely important and valuable to the people of Newfoundland and Labrador. Allocation policies since the late 1970s have aimed, in part, to allocate the resource to promote regional economic development in remote and fisheries dependent coastal communities. A key finding of our study is that the allocation of shrimp resources to *community-based organisations* can play a significant role in the social and economic sustainability of this province’s coastal communities. These community-based organisations developed business models that emphasised a holistic approach and diversified strategy for regional economic development. While the organisations remain focused on

generating profit, their primary goal is to develop long-term strategies for economic and social sustainability. In this way, our study reveals the potential for alternative models of regional economic growth and sustainability in fisheries dependent communities beyond the case of northern shrimp.

4.7.1 Summary of findings

The study explored six themes across the cases. **First**, we examined resource allocation policies in the shrimp fishery. The Canadian government used the principle of adjacency and community and regional development benefits as criteria in granting offshore licenses to community-based organizations in southeast Labrador in 1978 and in granting similar special allocations to regional organizations on the Northern Peninsula in 1997, and on Fogo Island in 2000. **Second**, we examined the organizations that received the resource allocations. The study revealed that the organizations - the Labrador Fishermen's Union Shrimp Company, St. Anthony Basin Resources Incorporated, and the Fogo Island Co-op - were created through grassroots collaboration and were broadly representative of their local communities. **Third**, our study examined how offshore licenses and special allocations were used by each organization. Our research found that organizations adopted mandates to use resource royalties and rents from their offshore licenses and special allocations to sustain the inshore small-boat fishery, enhance employment opportunities in local areas, particularly through economic development and diversification initiatives such as investing in small-scale fisheries, and through creating or improving processing plant infrastructure and employment.

The **fourth** theme is the relationship between inshore harvesters and processors, and in particular the links between crab and shrimp harvesting and processing. The development of a new inshore shrimp fishery in the 1990s involved significant investment in shrimp processing infrastructure and significant investment in harvesting infrastructure, including many bigger boats. It was very important for each organization to secure a shrimp processing license from the provincial government to permit the development of shrimp processing plants, which provided significant employment opportunities in each region; it was also important that they possess a crab processing license because companies with crab *and* shrimp processing licenses in other regions began to use their ability to purchase both species as a way to attract harvesters who held crab and shrimp quotas. In some cases, for example, processors outside the case study regions supported harvesters to gear up for the new inshore shrimp fishery in return for exclusive access to their product over a given period of time. These arrangements have played a role in re-shaping the relationship between processors and harvesters and undermined principles underlying federal fleet separation and owner-operator policies. And they have played a role in helping keep control over the resource and the processing of the resource in the region. **Fifth**, the organizations we studied not only used royalties from offshore licenses and special allocations to support inshore fisheries, but also used those revenues to invest in economic opportunities not directly related to the fishery. A notable example was the establishment of the Eagle River Credit Union in Labrador, which supported the community at large, and not only fish harvesting and processing enterprises. The three organizations in our study also invested wealth into non-fishery initiatives such as cultural activities, training, education, sports and recreation. The **sixth** and final theme is that in each case, people explained the organizations' continued use of wealth for

regional development benefits as rooted in a distinctive business model defined by community-oriented decision-making and investment mandates. There was a general sentiment amongst people familiar with these organizations that their ‘model’ works from a business viability perspective *and* a community sustainability perspective.

The encouraging experiences detailed above occurred in the context of significant uncertainties, challenges, and complexities at multiple levels. The allocation of a quota to a community-based organization, on its own, is not sufficient to ensure regional development outcomes. Other factors are also important, including federal and provincial licensing policies, the development of organizations that are strongly committed to and with a formal mandate to invest in the community, and development of an inshore harvesting sector responsible for supplying the raw material needed for employment opportunities in processing plants located in each region. Fisheries in coastal communities are complex and diverse, and are shaped by competitive pressures and changes in markets. Various regulatory, social, economic, and ecological processes affect whether and to what degree local community-based organisations can take advantage of a resource allocation over the long-term. The policy lesson is that the success or otherwise of a community allocation should be assessed in the context of these complex social, economic, regulatory and ecological processes at various levels of jurisdiction and geographic scales.

Fisheries resource allocations are embedded in complex global social and economic dynamics and processes. The challenge of global shrimp markets was an important theme in the research, especially with the development of the new inshore cooked and peeled shrimp sector. There is evidence that both processors and harvesters faced a steep learning curve in coming to terms with what was a new fish commodity with complex market dynamics. The early years were marked by market challenges of oversupply and problems with quality. As is typical of most natural resource commodity markets, harvesters and processors are faced with considerable price fluctuations that are difficult to predict and manage. While our interviews were conducted during a period of relative boom in the industry, this had come after several years of very low prices. The revenue from the shrimp allocations provided both the capital needed to gear up for new fisheries and a buffer to help them ride out the steep learning curve and experimentation necessary to move into a new species and a new market.

Fishery resource allocations have been, and in the future will continue to be, affected by changes in the abundance and distribution of the resource. The growth in abundance of shrimp populations in areas adjacent to northeast Newfoundland and southeast Labrador in a context of collapsed groundfish created opportunities for developing resource allocation policies to benefit coastal communities devastated by moratoria on groundfish fisheries. Changing ocean conditions and the potential recovery of groundfish such as cod, which prey on shrimp, pose significant imminent challenges for the shrimp fishery, which, as pointed out above, has been subject to controversy regarding policies governing how to distribute allocation reductions. As noted above, recent resource decline in SFA 6 resulted in DFO cutting quota through the controversial ‘last in, first out’ policy mechanism, which meant the Fogo Island Co-op lost its 1,000 tonne special allocation. While the lack of substantive consultation regarding the policy’s sudden introduction in the early 2000s has raised some question about the legitimacy of the policy, we also see the policy as being overly mechanical for dealing with shorter term ecological and other

changes and thus potentially undermining flexibility and resilience within the fishery and its potential to contribute to regional economic development.

Finally, given the complexities and contingencies involved in policy-making and development processes, it would be unwise to suggest there is a single model that might represent ‘best practice’ for designing and administering community shares and quotas. Nevertheless, our research showed that the three organisations were particularly sensitive to the needs of small boat harvesters and other constituencies that are often adversely affected by often interactive social and ecological change. While there is no single ‘model’ to follow to ensure fisheries allocation policies successfully contribute to regional development, it is important that policies and organizations follow certain broader priorities, including a commitment to local development and economic diversification and support for sectors that are vulnerable to restructuring. Policy makers should consider mechanisms that provide options for similar types of resource access and allocations in more of this fishery and in other fisheries such as, potentially, yellowtail flounder.

4.7.2 Policy recommendations

In the introduction to this report we suggested that the significance of our case studies is that they provide key insights into the impact of community allocations on the economic sustainability of remote coastal fishing communities. Our research findings point to the following policy recommendation:

Policy recommendation 1. Formally recognize the fisheries policy and regional development success stories represented by the Labrador Fishermen’s Union Shrimp Company, the St. Anthony Basin Resources Incorporated, and the Fogo Island Co-operative Society Ltd. Formally acknowledge the role that community-based organisations can play in developing successful business models for the economic and social sustainability of remote coastal communities.

Our second key policy recommendation emerges from our analysis of how the quotas were used by the three organizations, in a context of changing social, economic, regulatory and ecological processes that shape the fishing industry:

Policy recommendation 2: Establish a task force of fishing industry representatives, community representatives, policy makers, and academics:

- a. to build on this report by further examining the experiences of regional, community-based quotas and licenses in Newfoundland and Labrador and elsewhere;*
- b. to affirm community-based fishery resource allocations as a significant and viable policy option in efforts to promote inclusive and equitable regional economic development;*
- c. to identify ways to create more licencing and allocation systems that allow for the implementation of community-based access to and control over adjacent fisheries*

resources in a format that is consistent with federal owner-operator and fleet separation policy frameworks

We hope that this report and these recommendations inform on-going policy dialogue about resource allocation, regional development and about factors that should be considered when building a sustainable fishery in this province and elsewhere. It is time to shift the public policy discussion in this province away from the tired and oversimplified focus on the idea that there are “too many fishermen chasing too few fish” (or “too many processors chasing too few fish”) and join policy discussions occurring around the world that recognize how fisheries policy can contribute to innovative development outcomes for individuals, communities and regions with threatened connections to oceans and coastal fisheries resources.

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