

SHRIMP ALLOCATION POLICIES AND REGIONAL DEVELOPMENT UNDER CONDITIONS OF ENVIRONMENTAL CHANGE: INSIGHTS FOR NUNATSIAVUTIMMUIT

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2. Executive Summary

This report is part of a larger research program examining the relationship between fisheries policy and regional development in Atlantic Canada's northern shrimp fisheries. Since the extension of Canadian jurisdiction over its 200 mile Exclusive Economic Zone in 1977, federal policy makers have allocated shrimp licenses and quotas to cooperatives, community based organizations, inshore fish harvesters, large fishing companies as well as Indigenous groups. However, our knowledge of the relationship between fisheries policy and regional development outcomes in this fishery remains very limited, with the exception of case studies of a few organizations and regions in southeast Labrador and in Newfoundland. Despite the long history of substantial allocations of shrimp in northern Labrador/Nunatsiavut,¹ we know little about how effective allocation policies have been in meeting regional development goals for Indigenous communities in the region (Figure 1). The objective of this research is to build on and extend our larger research project by identifying allocation policies that have enabled Nunatsiavut communities, and people to benefit from the shrimp fishery and to identify those development benefits in a systematic way. The research findings help us meet two further practical objectives: to provide research evidence to inform federal, provincial, and municipal policymaking and decision-making and to assist regional bodies and community groups in their decision-making and activities aimed at improving social, economic, cultural, and environmental conditions.

¹ Our research covers the period before and after the establishment of the independent territory of Nunatsiavut. In other words, our work analyses northern shrimp allocations that were made for Northern Labrador interests that later became part of Nunatsiavut and the Nunatsiavut Government. Hereafter, we use the term Nunatsiavut for consistency and clarity.



Figure 1: Nunatsiavut and coastal communities

Source: MUN Geography

The key findings of this research:

ALLOCATION POLICY AND REGIONAL DEVELOPMENT

- **The Government of Canada distributed northern shrimp allocations to Nunatsiavut interests over the last four decades within a complex policy context, with an overall objective towards supporting inshore fishery development:** Using archival and secondary sources, as well as in-depth interviews with research participants, we provide a detailed analysis of the origins of shrimp allocations in Nunatsiavut and their use to support inshore fishery development. In particular, we highlight the important role of local and regional political organizations in securing northern shrimp allocations to: the Torngat Fish Producers Co-operative Society Limited (hereafter Torngat Cooperative), Pikalujak Fisheries Ltd., the Nunatsiavut Government, and individuals in the inshore sector. We also highlight the ongoing commitment of policy makers to support adjacent and Indigenous, particularly Inuit, fishing interests in Nunatsiavut.
- **Northern shrimp allocations have provided a crucial but often underappreciated foundation for inshore fishery development in Nunatsiavut:** The importance of northern shrimp to the coastal communities and fishers of Nunatsiavut should not be underestimated. The multi-species inshore fishery in Nunatsiavut, developed largely through the leadership of the Torngat Cooperative, would not exist as it does today without northern shrimp licenses and

Special Allocations. These licenses and allocations have generated substantial revenues (through contracts with owners of southern offshore vessel, which catch the allocations in return for royalties) that have been reinvested to support inshore fishery development. The Torngat Cooperative would likely not be able to operate fish plants at Nain or Makkovik without the cross-subsidization made possible by northern shrimp allocations. The development of turbot, crab and Arctic char fisheries, led by the Torngat Cooperative, would not have happened successfully without northern shrimp allocations. Very simply, there is a high probability that there would be no inshore fishery beyond fish caught for personal consumption were it not for the northern shrimp allocations. The extension of the fishing season, jobs, employment, the designate programme, and cash infusion into a partially subsistence society and the pride generated from control over resource during a period when they had little control were major outcomes in the allocation of shrimp to Nunatsiavut interests.

- **The shrimp fishery supports, directly and indirectly, hundreds of jobs and livelihoods in a region with approximately 2000 people:** We have documented in considerable detail the range of regional development benefits that emerge from northern shrimp allocations. They include designated employment opportunities for Inuit on offshore vessels, employment in fish plants, opportunities for inshore harvesters for shrimp and other species, and the development of new fisheries (e.g. crab and turbot), which in turn have supported coastal livelihoods. The number of people involved in fishery related developments is significant relative to the size of the population in coastal communities in Nunatsiavut. We have also documented non-fishery developments that have been supported through shrimp allocations, primarily through the activities of the Labrador Inuit Development Corporation (LIDC) and currently through the Nunatsiavut Group of Companies (NGC).
- **The Nunatsiavut Government, which was established through the Labrador Inuit Land Claim Agreement, has become more engaged in fishery development in recent years:** While the Torngat Cooperative has been at the forefront of fishery development in Nunatsiavut since it was established to manage a shrimp license in 1980, other allocation holders such as the Nunatsiavut Government have developed new, promising initiatives. Two important examples include the establishment of a new Fishery Development fund and a new designate programme for inshore harvesters that seeks to provide beneficiaries of the Labrador Inuit Land Claim Agreement with opportunities to participate in the inshore fishery. These are promising initiatives that enjoy the support of other key shrimp stakeholders including the Torngat Cooperative and the Torngat Wildlife, Plants & Fisheries Secretariat.

CHALLENGES AND OPPORTUNITIES

- **Fisheries governance has become increasingly important with the growth of allocation holders and new fishery-based interests in the region:** Shrimp resources have been allocated to a diverse group of stakeholders over the last four decades. Direct beneficiaries of northern shrimp allocations include two license holders (Torngat Cooperative and Pikalujak Fisheries Ltd./NGC), the Nunatsiavut Government, which is a Special Allocation holder, and several inshore harvesters who either own their own vessel or lease vessels from other owners. The Torngat Cooperative and the Nunatsiavut Group of Companies (NGC) are also members of the Northern Coalition, an organization that represents northern and Indigenous northern shrimp rights holders. Proposals for a 'one fishing entity' to consolidate Nunatsiavut fishing allocations and interests have not been realized, but research participants identified examples of ongoing

coordination and collaboration between the various organizations and individuals engaged in the northern shrimp fishery. We argue this coordination is important in terms of sustaining inshore fishery development efforts along northern Labrador's coast.

- **Land claims have been an important factor in enabling groups in the region to secure shrimp allocations but problems have emerged because of interpretive disagreements over provisions involving shrimp allocations:** The relationship between land claims and fish resource access is complex and dynamic. Although land claim agreements, like the Labrador Inuit Land Claim Agreement Act of 2005, enjoy constitutional status, they apparently do not trump the 'unfettered' power of the Minister of Fisheries and Oceans to allocate and distribute fish resources. This does not mean that Land Claims are not significant for successful land claimants. On the contrary, they were an important component in strategies both to secure fish resources in Nunatsiavut and to secure a more formal role in fisheries management. Under the Labrador Inuit Land Claim Agreement of 2005, the Torngat Joint Fisheries Board was established to make recommendations to the Minister in relation to the conservation and management of fisheries in the Labrador Inuit Settlement Area. As the implementation agent of the Torngat Joint Fisheries Board, the Torngat Wildlife, Plants & Fisheries Secretariat has engaged in extensive work to document and communicate annual recommendations to the Minister regarding the shrimp fishery. However, the Minister has not always followed those recommendations, particularly regarding the relative share of shrimp resources for Nunatsiavut interest. Fisheries allocation disagreements have been particularly acute in the shrimp fishery because of disagreement between the Department of Fisheries and Oceans and Nunatsiavut stakeholders about the language and provisions of the section of the land claim agreement that identifies resource allocation procedures and shares. Ultimately, research participants within the region believe that past and current allocations for Nunatsiavut are inequitable and that the spirit of the land claims agreement entitles northern Labrador a greater share of resources within and adjacent to Nunatsiavut territory.
- **Operating a commercial fishery in Nunatsiavut poses significant challenges:** The difficulty of operating a commercial fishery due to the environmental and geographic conditions is well recognized. The inshore fishing season in Nunatsiavut is very short, the region relies almost exclusively on air and marine transportation, and the weather and ice conditions can make fishing very challenging. Our research also identified factors that make it difficult to operate that are often less well recognized, including the need to hold inventories for longer periods of time, the long distance to markets, the relatively higher costs of freight, and the difficulty of operating in a global market that rewards rapid delivery of high volumes of products. While the Torngat Cooperative's inshore fishery development activities have demonstrated that these challenges are not insurmountable, they are important issues to be considered when assessing and improving the commercial fishery in Nunatsiavut.
- **While the shrimp fishery supports hundreds of jobs in Nunatsiavut, labour conditions have become acute:** The Torngat Cooperative is finding it increasingly difficult to secure sufficient labour for fish plants. Research participants suggested that short fishing seasons and the availability of year-round employment in new large-scale industrial resource development initiatives such as the Voisey's Bay nickel project have made working in fish plants less attractive to some people, particularly young people. The lack of a road infrastructure and a shortage of housing limit the potential for workers from other communities, regions, or countries. Despite these challenges, fish plants on the Nunatsiavut coast continue to be a vital source of

seasonal employment opportunity for a significant number of local workers who prefer to work in their own communities, particularly for individuals who enjoy the ability to engage in traditional activities such as hunting during the non-fishing season. For the Torngat Cooperative, plans to mechanize some parts of the labour process will ideally lead to a situation where a slightly smaller group of workers will process high quality fish, while at the same time reaching the number of hours required to qualify for employment insurance benefits. Research participants also suggested that few individuals residing in the region are employed in offshore vessels. Interview participants referred to only a handful of individuals, a sharp contrast to the early decades of the offshore shrimp fishery.

- **Allocation holders in northern Labrador have mandates to use shrimp resources to benefit the people of Nunatsiavut, but allocation holders struggle with the tension between supporting socially beneficial activities and focusing on only financially viable activities:** In addition to identifying significant regional development benefits, our research revealed challenges from an enduring tension between social goals and financial performance. Some of the early efforts of the Torngat Cooperative to use shrimp royalties for socially beneficial purposes had to be scaled back, in a context of changing fish resource conditions, as they threatened the financial sustainability of the organization. The transition from the LIDC to the NGC represents another recent example of an apparent shift in philosophy. While the LIDC was a not-for-profit development organization, the NGC aims to support profit generating enterprises. Finally, the debate on how to support inshore shrimp designates, some of whom want to purchase their own vessels using individual licenses and will be more likely to receive financial backing if they are assured of greater quotas, poses a challenge to the Nunatsiavut Government's approach of allocating communal licenses in a way that currently supports as many designates and crew as possible.
- **For the people of Nunatsiavut, the future will likely shine brighter if their attachment to marine resources is sustained, strengthened and diversified as environmental conditions change:** Inuit in Nunatsiavut have always been closely attached to marine resources, and this attachment has continued with contemporary settlements established in the region. These settlements established coastal communities that continue to depend on fish resources. Our research emphasizes the importance of advancing a better understanding of the relationship between contemporary fisheries allocation policy and socio-economic development for Inuit in this region. In particular, the Land Claim Agreement that established the self-governing Indigenous territory of Nunatsiavut refers to special obligations of the Canadian state to the people who have always depended on fish resources. We believe that continued strong local leadership in the region, combined with a responsive federal government committed to principles of adjacency, community development benefits, and the constitutional requirements for promoting the self-determination of Indigenous peoples, will ensure a promising role of fisheries in the region for the foreseeable future. The shrimp fishery can, in a context of future environmental challenges and opportunities, continue to play a key role in advancing the social, economic, and political relationships that have helped benefit the region in the past and any future decision on the shrimp fishery should be attentive to these complex relationships. However, future development prospects for the region will depend in part on the degree to which the people of the region can access and benefit from a diversified portfolio of fisheries resources as the North Atlantic ecosystem undergoes oceanic, environmental and climate-related transformations that are currently contributing to a dramatic decline of shrimp stocks off Newfoundland in areas just south of coastal Labrador. It is critical that decision makers identify

lessons from the experience with the shrimp fishery and apply that knowledge to other fisheries for the benefit of the people of Nunatsiavut.

Key recommendations to strengthen the relationship between shrimp allocation policies and regional development outcomes in the region:

Advance government relations regarding the following areas:

- Secure commitments by the Government of Canada to work with regional stakeholders to clarify and seek agreement on the dispute regarding the interpretation of shrimp allocation policy provisions in the Labrador Inuit Land Claim Agreement.
- Encourage coordination with DFO and other relevant governments and agencies on supporting the realization of the multi-year designate program.
- Encourage federal and provincial support for the Nunatsiavut Government's Fishery Development Fund.

Develop a northern fisheries development strategy:

- Develop a multi-stakeholder led northern fisheries development strategy for Nunatsiavut.
- Encourage coordination among resource allocation holders and other fishery stakeholders inside and outside the region with the objective to develop a northern fisheries development strategy.
- Secure support from federal and provincial fisheries management authorities and development agencies for a northern fisheries development strategy.
- Encourage innovation in overcoming geographical and transportation challenges, such as taking advantage of potential new transport activities involving the expansion of northern resource development.
- Build on the strengths, rather than the tensions, between collective approaches and organizations, such as the Torngat Cooperative, the Nunatsiavut Group of Companies and government-administered Special Allocations, and individualized approaches such as the inshore fish harvester designate program for beneficiaries.
- Explore opportunities to build on and develop new relationships with cooperatives and social enterprises in southern Labrador, Newfoundland, and northern regions of Canada as a way to share knowledge, experience and to potentially coordinate production, transportation, and marketing.
- Do not reject the option of considering the development of shrimp processing capacity in the region. Future environmental, resource, transportation, and technological conditions might make the option more feasible in the future.

Enhance labour relations, conditions and opportunities:

- Encourage the continued employment of people in the offshore and inshore fishery sectors.
- Encourage the training of local people in multiple skills and occupations for both offshore and inshore sectors.
- Explore opportunities for occupational and livelihood pluralism, whereby seasonal work in the fishery (e.g. inshore fish harvesters and/or fish plant workers) is combined with work in other sectors during the off-season (e.g. mining; construction) or with recognized work in traditional activities (e.g. hunting). The seasonal nature of inshore fisheries work provides opportunities for formal and informal links between traditional livelihood activities and seasonal wage labour that could be explored in more substantive ways, including with Employment Insurance agencies.

Enhance the capacity for future collaboration and research:

- Establish a mechanism to better inform the people of Nunatsiavut of the historical and ongoing impacts of the shrimp fishery in the region and to seek their input on ongoing strategic fisheries development initiatives inside and outside the shrimp fishery.
- Establish an interdisciplinary team of researchers (including both natural scientists and social scientists), regional partners, and government agencies to evaluate the current and projected future changes in shrimp stocks adjacent to Nunatsiavut.

3. Glossary and acronyms

DFO – Department of Fisheries and Oceans

FEPC – Fishery Emergency Policy Committee

TJFB – Torngat Joint Fisheries Board

LFUSC – Labrador Fishermen’s Union Shrimp Company

LIDC – Labrador Inuit Development Corporation

LIFO – Last in, first out

LILCA – Labrador Inuit Land Claims Agreement

MUN – Memorial University of Newfoundland and Labrador

NG – Nunatsiavut Government

4. Introduction

4.1 Project Background: Research Project on Northern Shrimp Fisheries

Since the extension of Canadian jurisdiction over a 200-mile Exclusive Economic Zone in 1977, the Government of Canada has allocated shrimp to a wide variety of organizations and groups as a way to support coastal community and regional development. Beneficiaries include fishing cooperatives, community based organizations, inshore fish harvesters, large fishing companies as well as Indigenous groups. However, our knowledge of the relationship between fisheries policy and regional development outcomes in this fishery remains very limited, with the exception of case studies of a few organizations and regions (Allain 2010; Foley, Mather, and Neis 2013; Foley and Mather 2016). This research project is part of a larger in-depth, multi-phased, multi-year collaborative research program initiated by Mather and Neis examining the relationship between fisheries policy and regional development in Atlantic Canada's northern shrimp (*Pandalus borealis*) fisheries, which extend from the Gulf of Maine to the waters between Baffin Island and Greenland. The origin of this larger research program was a successful Harris Centre Applied Research Fund project awarded in 2011-12 linked to the 7-year Community-University Research for Recovery Alliance (CURRA) (<http://www.curra.ca>). The initial ARF award allowed Mather, Neis and Foley to cement a research relationship with the 5-year (2010-2015) NSERC-funded Canadian Capture Fisheries Network (CFRN) project (<http://www.cfrn-rcrp.ca/Public-Home-EN>). It was also crucial in a successful application to SSHRC for a 3-year Insight Grant on shrimp and regional development (Principal Investigator: Charles Mather). The SSHRC-funded project is supporting research and fieldwork costs for case study research in New Brunswick, Nova Scotia, and Quebec. While our previous research included an examination of the relationship between shrimp allocation policy and regional development in southeast Labrador, little is known about other Labrador organizations engaged in the shrimp fishery. Some background on the early history of the fishery's development in north Labrador is available in an MA thesis (Rennie, 1989) but we know very little about the specific regional development dynamics of the allocations to Nunatsiavut groups over time. This project was developed in order to enhance our understanding of the relationship between fisheries allocation policy and regional development in Nunatsiavut.

4.2 Rationale: Regional Policy and Development Importance

Regional development in Newfoundland and Labrador (NL) has historically been closely tied to changes in fisheries policies (Sinclair 1989). Over the last three decades, shrimp fisheries have become an increasingly important yet seriously understudied source of regional development benefits in many coastal areas of this province. Shrimp fishing by Newfoundland and Labrador harvesters began in the northern Gulf of St. Lawrence in the late 1960s, when inshore, owner-operator longliner skippers from this province, Quebec, and New Brunswick fitted otter trawls to their vessels to catch shrimp (Sinclair 1983). Although northern shrimp are trawled by Atlantic Canadians in the Gulf of St. Lawrence and off the coast of Nova Scotia, the *northern shrimp fishery* generally refers to two specific fishing fleets, **offshore** and **inshore**, that operate in federal Department of Fisheries and Oceans (DFO) management zones between the Grand Banks off Newfoundland and just south of the Arctic ocean off Baffin Island.

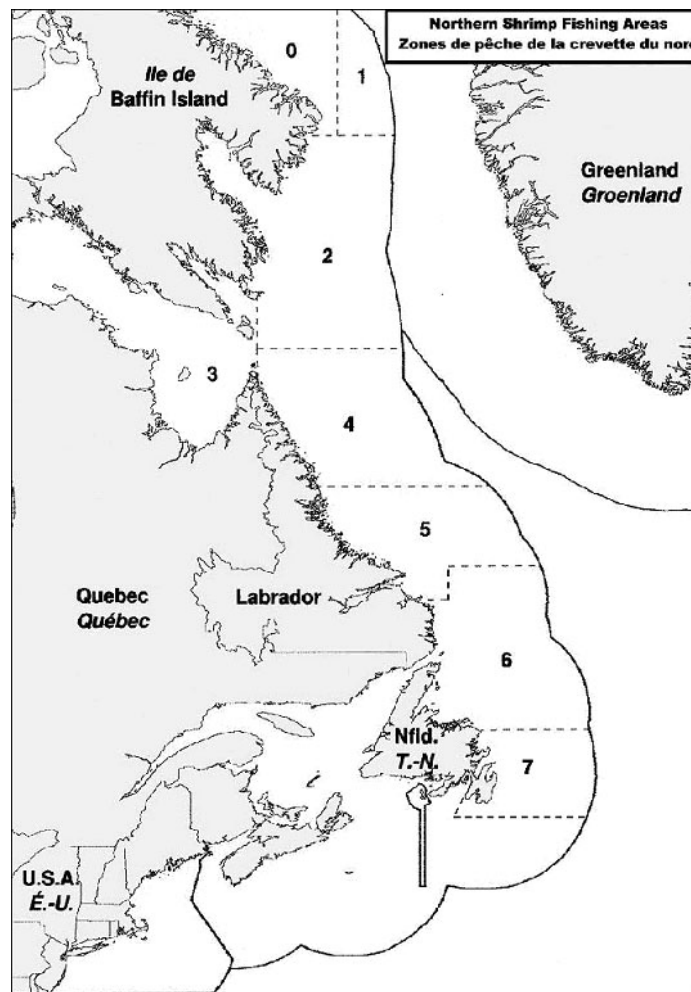


Figure 2: Shrimp Fisheries Areas 0-7

Source: Department of Fisheries and Oceans (2009)

The offshore and inshore *northern shrimp fisheries* grew through two different developmental phases that had major implications for regional development in NL. The offshore sector developed after Canada declared jurisdiction over its 200-mile Exclusive Economic Zone (EEZ) in 1977 (Figure 2). In response, the Government of Canada “Canadianized” the Nordic distant-water fleet of trawlers that caught shrimp between Canada and Greenland prior to the extension of jurisdiction. The federal government issued 11 offshore shrimp licenses in 1978 and another license in 1979, with a combined total quota of 8,100 tonnes. Four additional licenses were issued in 1987 to organizations in Québec, Nunavut, Labrador and the last offshore license was issued in 1991 to a Newfoundland-based organization (Barrow et al. 2001; DFO 2007). Newfoundland and Labrador-based inshore, owner-operator harvesters gained access to shrimp stocks located off the east coast of the province starting in 1997, when the federal government increased the allowable catches of northern shrimp from the 37,600 tonnes of the previous year to 59,050 tonnes in areas accessible to smaller vessels. Expanded catches in both the offshore and inshore sectors in the following decade helped Canada become the world’s largest producer of northern shrimp. By the late 2000s, northern shrimp was Canada’s leading seafood export by volume with total annual catches peaking at 185,974 tonnes in 2007 (DFO 2008, 2009, 2010, 2011). Newfoundland and Labrador has been a major beneficiary of shrimp fisheries. Northern shrimp’s contribution to the province’s fishing industry grew from virtually non-existent in the 1960s to accounting for about a third of its overall volume and value in the 2000s. In 2012, for example, the

province produced 85,583 tonnes of northern shrimp that generated a landed value of \$196 million for the provincial economy, accounting for 33.4% of the volume and 33.8% of the landed value of the province's entire capture fisheries sector (DFA, 2013).

During both developmental phases, the Government of Canada has allocated a proportion of shrimp licenses or quota to cooperatives and to Indigenous groups in Labrador. In addition to allocations to the Labrador Fishermen's Union Shrimp Company (LFUSC), a regional organization which has held two offshore licenses for shrimp since the late 1970s for the explicit purpose of contributing to regional development (Allain, 2010; Foley, Mather, Neis 2015), offshore licenses have been allocated to the Torngat Fish Producers Co-operative Society Ltd. (hereafter Torngat Cooperative) and Pikalujak Fisheries Ltd, both of which self-identify as Inuit organizations. During the expansion in the late 1990s and early 2000s, Special Allocations were granted to the Innu, to the Nunatsiavut Government, and to the Labrador Métis Nation, now known as the NunatuKavut Community Council (DFO, 2007). The federal government has acknowledged that the shrimp fishery has made an important "contribution to northern development through employment and training of northern residents, including a substantial number of Inuit and Innu residing in northern Labrador, Nunavik (northern Quebec) and Nunavut" (DFO 2007, 8). **Yet there is very little detailed information on the specific economic contributions that the shrimp fishery has made to Indigenous communities and their representative organizations.** Recent research has documented the contributions of the LFUSC to regional development in southeast Labrador (Snowadzky 2005; Allain 2010; Foley, Mather, Neis 2015) but there is no systematic account of the contribution of the shrimp fishery to regional development in Nunatsiavut. In this context, the central overall research questions that this project addresses are:

How have Inuit organizations in Nunatsiavut used their access to shrimp to generate regional benefits? What is at stake for regional development if their access is reduced or lost? What risks and options do they face under conditions of environmental change?

These questions are timely as policy and governance debates over allocation principles for northern shrimp have intensified since the late 2000s as northern shrimp stocks have begun to show signs of significant change (Foley 2013, 297; Mather 2013). An allocation problem resulting from such environmental change was identified in the original Marine Stewardship Council certification assessment for the northern shrimp fishery in 2007: "The key practical question is whether this change from a high abundance of groundfish and more modest abundance of shrimp, to the current situation where shrimp are very abundant and groundfish stocks depleted, is a permanent one?" (Aschan et al. 2008: 129). After three decades of increases in Total Allowable Catches and expanded allocations to various organizations and groups, the Government of Canada began reducing shrimp quotas in 2011 in response to declining resource abundance, particularly in areas adjacent to both Newfoundland and Labrador. More than 9,000 tonnes of quota were cut in 2011 compared to 2010 in key areas adjacent to NL. The federal government's implementation of the controversial "last in, first out" (LIFO) principle to allocate cuts resulted in the complete removal of two Special Allocations held by the Labrador Innu and the Fogo Island Co-operative Society Ltd. (Foley 2013: 300), prompting a federal government review of allocation decisions (DFO 2012). Further quota cuts in subsequent years and the application of the LIFO policy to the distribution of quota cuts have generated growing public concern. Questions about the fairness of resource allocation policies and negative regional development consequences have become particularly clear following the substantial shrimp quota reductions in 2014 and 2015. The Government of Newfoundland and Labrador responded to major cuts in 2014 by establishing an all-party committee on federal shrimp quota allocations to gather information about the potential impacts of current federal allocations and make representation to the federal government (DFA 2014), while the Fish Food and Allied Workers reiterated their call for a comprehensive review of the management of the fishery

(McCurdy 2014). The DFO responded again by establishing a second External Review of the Department's LIFO Policy on Northern Shrimp by a Ministerial Advisory Panel (MAP 2016). The Ministerial Advisory Panel recommended abolishing LIFO, a recommendation that was subsequently accepted by the acting Minister of Fisheries, Dominic LeBlanc. Independent research on allocations policies and regional development outcomes are thus both timely and pressing.

Recent and future decisions will likely have profound and long-lasting consequences for regions of the province that have benefited substantially from shrimp. There is an urgent need to document policy and development impacts to better inform decision makers as they seek solutions to the crisis. We take the approach that fisheries have complex underlying social-ecologies and their effective governance requires substantial investment in developing the information needed to function at multiple levels and using that information for consultation and to inform decision-making (Neis, Ommer, and Hall 2014). Yet there is a serious lack of information on the relationship between shrimp allocation policies and regional development in Nunatsiavut, especially for Indigenous communities. At this juncture, it is crucial to provide decision makers with credible evidence to negotiate complex sets of interests and values in equitable and sustainable ways. This report will therefore culminate in a set of recommendations for policy makers and for regional and community groups as they navigate a period of potentially significant environmental change and uncertainty.

4.3 Objectives

The objective of our larger research program is to gather evidence that is relevant to debates within the academy on resource access and use, and to debates within public policy arenas on how to best use fisheries resources for regional advantage, especially in rural and remote coastal communities and Indigenous communities. To meet this objective, the project conducts research in specific communities and regions in this province and in others in order to gather evidence that can inform decision-making to achieve equitable and sustainable regional development outcomes.

This report will provide a key element of this larger project by examining the regional development outcomes of shrimp fisheries allocations made to Inuit groups in Nunatsiavut. The allocations to Inuit groups in Nunatsiavut have been significant and include offshore licenses allocated in the late 1970s and 1980s and Special Allocations made from the late 1990s. Despite the long history of substantial allocations of northern shrimp in this region, we know little about how effective allocation policies have been in meeting regional development goals for Nunatsiavut communities. The specific research objective of the project is to build on and extend our larger research project by identifying fisheries allocation policies that have enabled Nunatsiavut communities and regions to benefit from the shrimp fishery and to identify those development benefits in a systematic way. We use the research findings to meet two further practical objectives: to provide research evidence to inform federal, provincial, and municipal policy-making and decision-making and to assist regional bodies and community groups in their decision-making and activities aimed at improving the social, economic, cultural, and environmental conditions. In order to meet these objectives, the project has focused on the following research questions:

1. What policy objectives informed decisions for allocations to Inuit groups in Nunatsiavut? What principles and criteria were used to allocate shrimp to Labrador groups? To what extent have those allocations been sensitive to regional development concerns? To what extent have policy objectives been achieved over time?
2. How have Indigenous organizations and groups used shrimp allocations for regional development benefits? What evidence is available for measuring regional development benefits from shrimp allocations in areas such as employment, infrastructure and business development, and social

services? What challenges and opportunities are Indigenous groups facing in the shrimp fishery? What information and resources do regional groups require for them to maintain access and benefits?

3. What lessons does the Nunatsiavut experience of allocating shrimp quotas to Indigenous groups offer policy makers and planners in efforts to use fisheries resource benefits in equitable and sustainable ways? What are the key differences and similarities between the case of Nunatsiavut and other regions that have benefited from the shrimp fishery? What information and advice is most relevant for future shrimp fisheries allocation policies and for regional organizations as environmental conditions change?

4.4 Research Methodology

For our research in Nunatsiavut, we began with a literature scan of policy documents, academic theses, archival documents, reports and other grey literature. This secondary published data provided an important basis for analyzing the relationship between fisheries allocation policy and regional development. However, we know from our experience with the broader research project in other regions that documentary analysis must be followed by targeted fieldwork in the regions affected by fisheries allocation policies. We therefore conducted fieldwork including key informant interviews for the project. The fieldwork consisted of 12 face-to-face interviews with key informants including fishing organization representatives, local government officials and community representatives. The questions for each informant depended on the specific context, but they were all informed by the project's key research questions around the relationship between shrimp allocation policy and regional development outcomes in Nunatsiavut. Interview data allowed us to: trace the history of shrimp allocations in coastal Labrador; analyze the impact of resource allocation on regional development in coastal Labrador; and examine the links between allocation policy and regional development outcomes in coastal Labrador in comparison with the broader research program.

The research also incorporated data from two Nunatsiavut Fisheries Workshops facilitated by the Torngat Wildlife, Plants & Fisheries Secretariat held in Happy Valley-Goose Bay on November 17th and 18th, 2015 and on November 22nd and 23rd 2016. For the 2015 workshop, delegates from around the region (including government officials, harvesters, employees of the Torngat Cooperative, Department of Fisheries and Oceans scientists and Torngat Secretariat employees and Board Members) were separated into three groups and discussed three questions for a period of 15 minutes. The three questions:

- what are the main issues around allocation policies and practice?
- what benefits have been generated from the shrimp fishery (directly and indirectly) in areas of employment, infrastructure, business development, social services, etc?
- what's happening right in the shrimp fishery, and what opportunities are there for the future?

Overall, the research methods were used to develop a comprehensive synthesis of findings and recommendations for decision makers.

4.5 Theoretical Approach

The theoretical approach of this project is informed by political ecology, an interdisciplinary mode of analysis and explanation used mainly by geographers, anthropologists, and political scientists to improve our understanding of “the conditions and change of social/environmental systems, with explicit

consideration of relations of power” (Robbins, 2012: 32). Political ecology is analytical in its concern with explanation and understanding, but also practical in uncovering empirical evidence that can help communities and marginalized groups make decisions (Robbins 2012). Recent applications of political ecology to fisheries contexts have made important contributions to our understanding of the development dimensions of fisheries systems by paying close attention to the social and political relations and institutions that organize resource access, property, ownership, and markets in resource systems (Mansfield 2007; Campling, Havice and Howard 2012; De Alessi 2012; Havice and Reed 2012).

Within the diverse field of political ecology, we applied a specific *theory of access* to examine the relationship between fisheries allocation policy and regional development. Developed by Ribot and Peluso in a context of rural development studies, access analysis is “the process of identifying and mapping the mechanisms by which access is gained, maintained, and controlled” (Ribot and Peluso, 2003: 160). Access analysis involves:

- (1) identifying and mapping the flow of the particular benefit of interest;
- (2) identifying the mechanisms by which different actors involved gain, control, and maintain the benefit flow and its distribution; and
- (3) an analysis of the power relations underlying the mechanisms of access involved in instances where benefits are derived (Ribot and Peluso, 2003: 161).

This framework informs our key research questions, and it was used to help the researchers identify and analyze the means, relations, and processes that enable community and regional groups to derive benefits from shrimp resources.

4.6 Significance in Relation to Existing Research and Literature

This research and report contributes to debates within the academy on fisheries access and to debates within decision-making circles on how to best allocate fishery resources. Resource access (and exclusion) arrangements is one of the most challenging issues in fisheries policy theory and practice (Gordon 1954; Hardin 1968; Feeny et al., 1989), with recent international debates focusing largely on the merits and effects of one form of resource access arrangements—Individual Transferable Quotas (ITQs). There is now a large body of work that has assessed the effects of the ITQ allocation system on the economic structure of fishing industries, harvesting practices, and on conservation of commercial fish species (Carothers and Chambers 2012; Olson 2012; Pinkerton 2013). One of the consistent findings of this research is that the introduction of ITQs often leads to a transfer of quota and resource benefits from small, remote fishing dependent regions to larger fishing centres. The transfer of quotas and economic benefits out of smaller, remote coastal communities has been documented in Canada (McCay 2004), Iceland (Palsson and Helgason 1995), and Alaska (Carothers *et al* 2010; Olson 2012; Neis and Ommer 2014). While these studies provide evidence to policy makers on the risks of ITQs for community and regional development, we need more evidence about alternative allocation and access arrangements.

A range of access approaches and mechanisms can embed resources in coastal communities and regions. For example, in some fisheries, policies and institutions have the effect of tying resource benefits to communities or regions through residency requirements, owner-operator licensing provisions, minimum processing requirements, support for subsistence fisheries, limitations on the mobility of capital, and share systems of compensation (St. Martin 2007). Direct allocations to groups of harvesters and community groups, with constraints on their use and transferability, also can help ensure fisheries resources benefit communities and regions (Eythórsson 2000; Carothers 2011; De Alessi 2012). Since the 1980s, cases of the allocation of shares of quotas to organized groups of fishers, co-operatives, indigenous groups, and multi-stakeholder groups within which decisions about more detailed sub-

allocations are made have emerged across North American, Europe, and New Zealand. Examples include a community management board program for small-scale fisheries in the Scotian Shelf region of Atlantic Canada (Apostle et al 2002; McCay 2004), producer organization quota management programs in the Netherlands and the United Kingdom (Crean 1999), the Alaska Community Development Quota program for remote indigenous communities and regions (Ginter 1995; Holland and Ginter 2001; Mansfield 2007), community-oriented sector management developed in the last decade in the Northeast US (McCay 2011), and certain offshore licenses and Special Allocations in the northern shrimp fishery in Atlantic Canada (Foley, Mather, Neis 2015).

Recent reviews of new fisheries allocation policies in the US have called for greater consideration of alternative ways that resource access rights or privileges can be designed, created and allocated (EcoTrust 2011: 21). Those studies suggest that policy makers should leave room for access arrangements that can provide people living in coastal communities an opportunity to make livelihoods for themselves into the future. This research joins these policy-oriented studies to identify and investigate the inventory of alternative ways of organizing fisheries systems including designing allocation systems within which attention is paid to both equity in access (Pinkerton 2013) and the need to protect and even enhance the role of fisheries in regional economic development (Foley, Mather, and Neis 2013). The research also contributes to the evidence base informing decision makers in NL as researchers have highlighted the need to more fully and systematically document and compare the direct and indirect contributions of fisheries to community and regional development in the province (Neis and Ommer 2014). This research thus helps to identify problems, to generate evidence on best practices, and to better develop solutions and strategies for maximizing regional development benefits.

4.6 Clearances

The research proposal was reviewed and approved by the Nunatsiavut Government Research Advisory Committee and by the Grenfell Campus Research Ethics Board (REB), which found the project in compliance with the Tri-Council Policy Statement on Ethical Conduct for Research Involving Human Participants.

5. Case Study: Nunatsiavut

The following analysis is divided into three sections. First, we provide detail on the allocation policy decisions in the northern shrimp fishery generally, and specifically for the Nunatsiavut case. Drawing on published and unpublished papers in various archival collections, we also explore the changing and dynamic economic, social and political context of these allocations along the Nunatsiavut coastline (Section 5.1). In the second section, we turn to examine the socio-economic impacts of northern shrimp licenses and Special Allocations. Our analysis includes the early development activities of the Torngat Cooperative in the 1980s, and its response to fish resource challenges in the early 1990s. We also examine recent developments linked directly to northern shrimp allocations including non-fishery related investments in Nunatsiavut and new policies aimed at further revitalizing the inshore fishery (Section 5.2). In the third section we turn to examine some of the challenges and opportunities of Nunatsiavut's fishery as it relates to northern shrimp in the context of local and regional socio-economic and environmental changes (Section 5.3).

5.1 History and context of northern shrimp allocations in Nunatsiavut

There are several separate but interlinked processes that shaped the initial allocation of an offshore shrimp license to Nunatsiavut interests in the late 1970s. The **first** is national in scale and is associated with the declaration of Canada's 200 exclusive economic zone (EEZ) in 1977, and the enclosure of significant northern shrimp resources within Canadian waters. Licenses for this new resource were allocated starting in 1978, and reflected the priorities of the Minister of Fisheries, Romeo LeBlanc (Foley and Mather 2016). As is well known, LeBlanc was a champion of inshore fishers and the coastal communities they supported, and he argued that the enclosure of fish resources through the 200 mile EEZ should benefit inshore harvesters and fish dependent communities (Foley, Mather, Neis 2015). In terms of northern shrimp this meant that of the 11 initial offshore licenses, 8 were allocated to community groups and cooperatives across Atlantic Canada. Three of these licenses were held for Labrador interests in part through active lobbying of Richard Cashin, President of the fledgling Fish, Food and Allied Workers Union (now FFAW-Unifor). Cashin felt strongly that since northern shrimp were adjacent to Labrador, and adjacency was a key consideration in debates over allocation for other valuable resources such as cod, local interests should gain preferential access to the resource. He also argued that coastal communities along the Labrador coast needed access to new fish resources given the collapse of local cod stocks in the late 1960s (Foley and Mather 2016).

Local political and economic changes in Nunatsiavut represent the **second** set of processes that shaped the allocation of the northern shrimp resource in this region (LRAC 1978). These local processes help explain the allocation of a shrimp license to Nunatsiavut in the 1970s, the allocation of a second shared license to the Labrador Inuit Development Corporation (LIDC) in the late 1980s, as well as subsequent Special Allocations of shrimp from the 1990s. Politically, the 1970s was an important period for Labrador in that Indigenous interests began to mobilize for fairness in and control over resource use and allocation, and for a formal land claim process (Brantenberg and Brantenberg 1984). The Labrador Inuit Association (LIA) was established in 1973 with a mandate to strengthen Inuit culture and to organise land claims on the basis of Indigenous rights. The LIA played a very important role in mobilizing Indigenous interests in the region, including claims for northern shrimp. It was also responsible for establishing the Labrador Resources Advisory Council (LRAC) in 1976 to promote Labrador interests with regard to oil, gas and other resources including fish. Thus, the allocation of

shrimp to the region was not driven only by external factors, but was also shaped by local efforts to secure access to and control over resources.

The LIA was involved in significant organizational changes to the fishery in Nunatsiavut in the late 1970s that are relevant to the northern shrimp case. Up until the late 1970s, the Newfoundland and Labrador government managed fish processing infrastructure along the Nunatsiavut coast, including processing plants at Nain and Makkovik (Nordco 1983). The province managed this infrastructure through the Northern Labrador Service Division, a unit that was concerned with the welfare of Indigenous groups in northern Labrador (Brantenberg and Brantenberg 1984). In 1978, the decision was made to transfer responsibility for northern Labrador's fish processing centres to the province's Department of Fisheries, which then announced its intention to lease these facilities to the highest bidder (FEPC 1978). This decision happened at the same time as the announcement that three offshore shrimp licenses were being reserved for Labrador interests (LRAC 1978). The LIA responded to both of these issues – i.e. the decision to lease processing facilities and the opportunity of securing one or more shrimp licenses – by establishing the Fishery Emergency Policy Committee (FEPC). The FEPC was represented by fishers and plant workers from northern coastal communities as well as members of the LIA and the LRAC (Rennie 1989). Its task was to negotiate taking over the fish plants at Nain and Makkovik, and to establish a regional cooperative that would bid for the three shrimp licenses being held for Labrador interests (FEPC 1978; Nordco 1982). In 1980 the FEPC helped establish the Torngat Fish Producers Cooperative Society Ltd., with the support of Memorial University's Extension Service fieldworkers who organized workshops held across the region on the function and role of fishing cooperatives.² While the province did not, in the end, sell its processing facilities along the northern Labrador coast, and continued to manage these facilities during the 1980s, the Torngat Cooperative was Nunatsiavut's first northern shrimp licence holder, and it effectively became responsible for fishery development in the region.

During the 1980s, five additional offshore licenses were allocated by DFO and three of these went to Indigenous interests including a shared license between the Labrador Inuit Development Corporation (LIDC)/Pikalujaq Fisheries Ltd. and a private company with an offshore vessel (National Sea Products Ltd.). The decision to allocate a shared license between the LIDC and a private company established a formal partnership that allowed the LIDC to earn royalties from a share in an offshore license.

From the late 1990s, with the expansion of the northern shrimp biomass, new allocations of shrimp were made to inshore harvesters, but there were also additional allocations made to offshore license holders and new Special Allocations were granted to Indigenous interests, including for Nunatsiavut. In 1997 the LIA acquired a 510 tonne quota of shrimp for Shrimp Fishing Area (SFA) 5 that was later increased to 1,260 tonnes. In addition, the Torngat Cooperative and the Nunatsiavut Government benefited from a share in a 6,120 tonne allocation to the Northern Coalition, a group of northern offshore shrimp license holders that was established to represent northern and Indigenous licence holders. Members of the Northern Coalition included The Torngat Fish Producers Cooperative Society Limited (LFUSC), the Nunatsiavut Group of Companies (formerly LIDC), Labrador Fishermen's Union Shrimp Company, Qikiqtaaluk Corporation, Makivik Corporation and Unaaq Fisheries. The original 6,120 tonne allocation was split into 7 shares with the LFUSC receiving two shares for their two licences and the other members receiving one share for their single licence.

² MUN Extension was established in the late 1950s as a community development arm of Memorial University. It was very active during the 1960s and 1970s in promoting economically efficient cooperative enterprises across Newfoundland and Labrador. For more detail on MUN extension's history see Webb (2014). For some of the specific activities of MUN Extension in northern Labrador during the early 1980s see Canadian Foundation (1984).

The allocation of offshore shrimp licenses in the 1970s and 1980s marked a period of excitement for Nunatsiavut communities as it provided a real opportunity to take control of resource development. Long marginalized and controlled by forces outside the region in the context of European colonialism (LRAC 1978), Inuit in Nunatsiavut seized an opportunity to exercise significant control over a potentially lucrative resource:

I think it's the most significant thing that ever happened in Labrador, to tell you the truth, that benefited the people directly... the shrimp allocation was certainly a blessing for northern Labrador for the native people, but it was like stepping on new ground, too, right, because you never had it before. We never got nothing before this, yeah. [Interview 0011]

The offshore license that was granted to Nunatsiavut interests in 1978 came with the understanding that the objective in using the license was ultimately to benefit coastal communities in the region (Nordco 1982).

Yet, as one research participant noted, this new opportunity did not come without its own anxieties and concerns:

but this is something completely brand new for the people up there, because for hundreds of years the Moravian missionaries had tight reins of everybody. They ran everything. Then after that, it was the Social Services. It was the welfare workers, officers, the school teachers and RCMP, stuff like that, you know. So, now, here comes a bunch of people from the university [MUN Extension] saying, "What do you want, now, to have your own fishery?" And the people are saying, "Oh, what do you mean? We can't... we got no experience in this. We got no knowledge. How are we going to do this," you know.... They had people that spoke Inuktitut with them that was really good – and took a survey in each place, and the majority of people... I think it was probably up... around 70 to 80 percent of the people in all the northern communities agreed that the co-operative would be the best entity to handle the fishery in northern Labrador because the co-op is... it fits right in with native philosophy, in a way, of the sharing of the resource, you know? [Interview 0011]

This sense of trepidation over the northern shrimp license was also articulated in a Labrador Resources Advisory Council position paper released in 1978 (LRAC 1978). The report noted that northern Labrador interests were severely handicapped by a lack of experience in commercial fisheries and the LRAC requested financial and technical advice to assist in managing this new resource. At the same time, the LRAC demanded that the resource be used in a way that benefited local residents and the Labrador fishery that had been hit hard by the collapse of inshore cod stocks. The allocation of shrimp, they argued, should not “repeat the familiar and very bitterly-resented pattern which already governs the exploitation of every other resource in Labrador. Whether it is fish, iron ore, pulpwood or hydro power, wealth flows out of Labrador in a form which ensures that the main benefits will be felt somewhere else” (LRAC 1978, 1). The top priority should be “to rebuild the Labrador inshore fishery, not to help already prosperous firms and thriving communities fatten themselves on our future” (LRAC 1978, 1).

The LRAC articulated specific demands including the training of Labrador fishermen as crewmen on offshore boats into senior positions, processing of shrimp onshore to benefit local residents, and the use of resources from the shrimp license to bolster the inshore fleet and the processing plants that they served. The LRAC’s demands applied to the license allocated to Labrador, and to the ones allocated to companies that fished Labrador waters:

We believe it is vital that some form of contribution to the Labrador fishery be written into the licensing program from the beginning. If the first eight non-Labrador licenses are given with no such strings attached, the shrimp fishery will take the familiar extractive approach right from the start, scooping wealth from our waters and scurrying south (LRAC, 1978, 5).

Backed by strong leadership at local and federal levels committed to principles of adjacency and community economic benefits, the Torngat Cooperative in particular worked hard to meet these development objectives by using its offshore shrimp license to expand the inshore fishery, reinvent fishery development, and extend the fishing and processing season.

In the sections below we explore in detail how the licenses and later Special Allocations of northern shrimp have been, and are being, used by groups and agencies in Nunatsiavut, beginning with the Torngat Cooperative. While not all of the ambitious demands of the LRAC were achieved, the principle that northern shrimp licenses and allocations should be used to support local fishery development and other socio-economic goals to benefit local people became a deeply rooted principle amongst all stakeholders in Nunatsiavut.

Timeline

- 1973 – Establishment of the Labrador Inuit Association to strengthen Inuit culture and to organise land claims on the basis of Indigenous rights.
- 1976 – Establishment of Labrador Resources Advisory Council (LRAC) to advise provincial government on oil, gas, mining, fishing and community development.
- 1977 – Canada declares exclusive rights to 200 mile exclusive economic zone.
- 1978 – Department of Fisheries and Oceans allocates 11 offshore northern shrimp licenses (3 held in reserve for Labrador)
- 1978 – Labrador Service Division transfers fishing operations to Department of Fisheries, which then invites proposals to lease plants in Nunatsiavut (Nain and Makkovik).
- 1978 – LIA submits Land Claim to Federal Government.
- 1978 – Fishery Policy Emergency Committee (FEPC) formed in response to lease proposals and to the potential allocation of northern shrimp licenses to Labrador (through the encouragement of the Labrador Inuit Association). The FEPC is represented by fishermen and fish plant workers from all six northern communities, the LIA and the LRAC. Its role is to negotiate takeover of fish plants at Nain and Makkovik, and to establish a regional cooperative for the shrimp license and for the management of fisheries infrastructure along the Nunatsiavut coast.
- 1979 – FEPC launches cooperative education programme in all six northern Labrador communities with the support of LIA and MUN Extension Service.

- 1980 – FEPC assists the people of Labrador to establish the Torngat Fish Producers Co-operative Society Ltd (Torngat Cooperative). The northern shrimp license that had been held in trust for Nunatsiavut interests is allocated to the Torngat Cooperative. Since the Torngat Cooperative does not own an offshore vessel, the coop subsequently establishes contracts with owners of offshore vessels that catch its quotas in return for a portion of the revenue. The offshore companies pay the Torngat Cooperative royalty payments, which become the main source of revenue to support inshore fishery development activities.
- 1981 – Fisheries operations in Nunatsiavut are run in joint-management with Torngat Cooperative and Department of Fisheries.
- 1982 – LRAC is dissolved and the Labrador Inuit Development Corporation (LIDC) is established as the economic development arm of the LIA.
- 1987 – A new offshore license is allocated to Pikalujak Fisheries Ltd., a joint venture of LIDC (50% owner) and a private company (50% owner) based in Nova Scotia (initially National Sea).
- 1997 – Northern Coalition receives 6,120 tonnes. There are six members of the Northern Coalition: the Torngat Cooperative, LIDC/Nunatsiavut Group of Companies, the Labrador Fishermen’s Union Shrimp Company, Qikiqtaaluk Corporation, Makivik Corporation and Unaaq Fisheries.
- 1997 – LIA 510 tonne Special Allocation in SFA 5.
- 2003 – LIA Special Allocation quota increased to 1,260 tonnes.
- 2005 – Labrador Inuit Land Claim Agreement is completed. Nunatsiavut Government established on 1 December 2005.
- 2011 – Nunatsiavut Group of Companies (NGC) replaces the LIDC. Within the NGC, FishCo is identified as the organization that manages the government’s licences and quotas, including its 50% ownership stake in Pikalujak Fisheries Ltd.

Table 2: Northern Shrimp Allocations in Nunatsiavut

Source: DFO, 2011

Allocation holder	Type	Details	Year	Tonnes	Purpose	SFA
Torngat Cooperative	License	1 offshore license	1978	1/17 th of total offshore allocation	Inshore fishery development	All SFAs
	Special Allocations	Northern Coalition	1997	One seventh share of 6,120t		SFA 5
Pikalujak Fisheries Ltd. (50% LIDC/NGC)*	License	0.5* offshore license	1987	.5/17 th of total offshore allocation	Regional economic development, business development	All SFAs
LIA/Nunatsiavut Government	Special Allocations	LIA allocation	1997	510t	Regional economic development and communal licenses for inshore shrimp	SFA 5
		Northern Coalition	1997	One seventh share of 6,120t		SFA 5
		LIDC/NGC allocation	2003	750t		SFA 5
		Inshore allocation	2011	312-537t		SFA 4

5.2 Socio-Economic Development Impacts

This is one of the licenses that were reserved especially for Labrador in order to enhance the development of the fishing industry along the Labrador coast. This license must primarily benefit Labrador communities. Arrangements must be made to make sure that Labrador communities will benefit to the maximum from this fishery (Romeo LeBlanc cited in Torngat 1982a, 4).

5.2.1 Torngat Fish Producer's Cooperative – early interventions

The offshore shrimp license for Nunatsiavut was held in trust between 1978 and 1980 until the Torngat Cooperative was established. In those two years, the FEPC chartered vessels and held royalty revenues in a trust while at the same time working towards the establishment of a cooperative that would

eventually take over the license and assume responsibility for fishery development along the Nunatsiavut coast. They were assisted in this work by Memorial University of Newfoundland (MUN) Extension Service field workers, who had experience in training people in coastal communities about cooperatives. Field workers, some of whom spoke Inuktitut, traveled to the main coastal communities along the Nunatsiavut coast and carried out a number of cooperative educational projects. MUN Extension continued to support the initiative after the fisheries cooperative was established in 1980 by training new members of the Torngat Cooperative on cooperative philosophy and principles, roles and responsibilities, problem solving, long term planning, policy development and implementation, and interpersonal and group relations.

The Torngat Cooperative was formally established in December 1980 with the mandate to manage the northern shrimp license and to develop and coordinate fisheries along the Nunatsiavut coast. Annual membership fees were initially very low, which allowed the cooperative to attract a large membership of between 400 and 500 people, most of whom were Inuit. Torngat's membership is not, however, restricted to Inuit and the membership also includes smaller numbers of people from Innu and settler communities. Our interview participants indicated that the Torngat Cooperative used the constitution of the Fogo Island Cooperative Society Ltd as a model for its own constitution and bylaws. The cooperative's Board has 10 members drawn from mainly from coastal communities. Annual General meetings of the Torngat Cooperative are complicated affairs given the geographically dispersed membership. The annual meeting is a three-week process starting with five sectional meetings held in five communities, and ending with the Annual General Meeting in the sixth community along the north Labrador coast. The costs involved in organizing and hosting the sectional and AGM are substantial – up to \$30,000 a year.

Torngat's mission statement is: "To promote on a co-operative basis the economic interests of its members and of communities in the electoral district of Torngat Mountains by using its funds and efforts for harvesting, procuring, transporting, collecting, buying, selling, storing, processing, manufacturing, distributing, marketing and in every way dealing with economic goods and services" (cited in Canadian Foundation, 1984, p. 5).

The allocation of the single shrimp license to the Torngat Cooperative came at a time of significant change and initial optimism in the local fish economy, with direct impacts on coastal communities in Nunatsiavut that were so dependent on this resource.³ Three key processes deserve special mention. **First**, the availability of fish resources had changed significantly during the 1970s. While coastal communities in Nunatsiavut had long depended on northern cod stocks, these collapsed in the mid-1970s mainly due to the rapacious efforts of foreign fishing fleets. Coastal communities in Nunatsiavut in the late 1970s and early 1980s relied almost exclusively on salmon and Arctic char stocks. There were, however, hopes that cod would recover following the declaration of Canada's 200 mile Exclusive

³ One of the reasons for this new optimism was a series of commitments from the federal government to new investments in the fishery following the crisis in the Atlantic fish processing sector in the early 1980s. Significantly for northern Labrador, one of the proposals was for the establishment of a Northern Fisheries Development Corporation (NFDC), which would be responsible for fishery infrastructure from the Northern Peninsula of Newfoundland to the northern tip of Labrador. Unfortunately for northern Labrador, the \$15 million that was initially allocated to support the development of the NFDC was cut from the 1984/5 federal budget, and the impetus for the concept 'withered on the vine' (Parsons 1993, 477).

Economic Zone (EEZ), which effectively barred foreign fleets from the region's cod stocks. A **second** change involved proposed shifts in the management of the fishing infrastructure along the coast of Labrador. Up until the late 1970s the Provincial government owned and managed fish plants and other infrastructure related to fishing along the coast that had been built using both federal and provincial funding. In 1978 the Government of NL announced that it planned to sell fish processing plants and other infrastructure to the private sector. As we noted earlier, local groups, including the LIA, were extremely concerned that the sale of these assets to the private sector would seriously undermine the local fish economy. **Third**, in the early 1980s there were new initiatives to upgrade and develop Labrador's fish resource development infrastructure. The Government of Canada's Fisheries Development Programme had targeted coastal Labrador as a site for fisheries development in the 1980s and had committed \$13.5 million in investments to support fisheries infrastructure. In order to provide specific recommendations on potential investments and upgrading, the Department of Fisheries and Oceans commissioned the Newfoundland Oceans Research and Development Corporation (Nordco) to provide a detailed study of the challenges facing fishery operations in coastal Labrador with a view to identifying the key problems hampering fisheries development (Nordco 1983). The Nordco report recommended a total investment of \$20 million to rebuild plants, construct new wharfs and improve transportation systems. The Nordco vision was to create an efficient, standardized and containerized fish handling and transportation system that would serve all of the key settlements along the Labrador coast.

In this context of these policy developments, the Torngat Cooperative embarked on an expansive program of inshore fishery development along the Nunatsiavut coast. Using royalties from their offshore license – which generated between \$350,000 and \$500,000 a year at this juncture – the Torngat Cooperative moved quickly on a number of different fronts to develop and diversify the local fish economy. In a remarkably short period of time the Torngat Cooperative was able to double employment along the north coast with as many as 700 people on the payroll in the early 1980s. During the same period the cooperative paid between \$385,000 and \$400,000 in wages for fish processing and bought an additional amount of fish worth \$500,000 from 105 inshore harvesters. The Torngat Cooperative's activities had an immediate impact in increasing employment and providing significant cash injection into local economies.

Specific projects engaged by the Torngat Cooperative included:

- **North of Nain Arctic char project.** The bays around Nain had been fished out following the resettlement of Inuit households from Hebron. Bays further north of Nain, however, contained strong stocks of char. In the early 1980s, the Torngat Cooperative arranged boats to take fisher families up to the Saglek and Hebron fjords to fish during the summer. The impact of these trips was both economic and social: these trips prevented “a summer's dependence on welfare payments to Inuit fishermen, in order to give the Inuit a chance to return to their ancestral homeland to earn money rather than be given hand-outs, in order to produce a top-notch Canadian quality product” (Torngat Fish Produce's Co-operative, 1982a, 6).
- **Turbot processing at Makkovik.** Fishers catching cod in the early 1980s were also catching turbot in their nets. Torngat secured permission from the province to process and freeze turbot fillets at the Makkovik plant. Torngat also arranged plant worker training through the St John's based College of Fisheries (Marine Institute). The purchasing of turbot from inshore harvesters and the processing of turbot at the Makkovik plant subsequently became a crucial part of the Torngat Cooperative's economic activities.

- **Nain.** Fish processing infrastructure has existed at Nain since the 1970s. In 1989 the fish plant at Nain was upgraded by the Provincial Department of Fisheries with new equipment to process frozen groundfish, scallops, salmon and char, and a new smoking machine.
- **Over the side sales.** During the 1980s, the Torngat Cooperative was involved in selling fish that it could not process to domestic and foreign trawlers. This was an interim measure, and was generally not favoured by the Torngat Cooperative, which preferred to process fish through its own plants.
- **Hopedale.** In the 1980s the Torngat Cooperative supported an experimental turbot fishery around Hopedale. During this period, cod was also being processed at Hopedale although cod stocks were under considerable pressure in Nunatsiavut long before the 1992 moratorium.
- **Rigolet salmon and sea trout processing.** The Torngat Cooperative renovated the fish handling unit at Rigolet at a cost of \$200,000 in the 1980s. The newly renovated plant focused on salmon and sea trout and employed 30 plant workers, in a 10-12 week operation. The new initiative offered real and promising opportunities to local fishermen. The cooperative supported this operation through marketing efforts that involved exporting fresh fish to markets in Toronto and Montreal. As one contemporary commentator wrote, “The performance of its marketing programme was noted as exceptional...and has resulted in several new products being placed on the market” (Rennie 1989, 298).
- **Postville and Davis Inlet.** Feeder plants/facilities were set up at Postville and Davis Inlet so that fishers at these locations were able secure cash for fish harvests.



Makkovik Harbour with wharf and fish processing plant infrastructure in the background, August 2015 Photo: Paul Foley

These diverse projects along the Nunatsiavut coast were guided by a number of key principles. First, the Torngat Cooperative wanted to ensure that royalty payments from the offshore shrimp license went

directly into developing and diversifying the inshore fishery. In their 1982 report, they noted: “It is the intent of the Co-op to link the offshore operations to the inshore in terms of reinvesting profits for development funds to support the inshore” (Torngat Fish Producers Cooperative 1982a, 1). A second principle was to ensure that all six coastal communities were served by the cooperative. The Torngat Cooperative’s membership was distributed across all of the six main coastal communities, and they were committed to serving all of them.

Overall the focus of the Torngat Cooperative during the first years of its operation involved attempts to develop new species, finding new fishing areas for local inshore harvesters, lengthening the season for plant workers, generating employment, and facilitating training of its members in fish handling, processing, fish quality, and book keeping. The income and the employment opportunities generated had implications that sometimes registered as a loss from a financial perspective, but the Torngat Cooperative always stressed the broader social impact of its work in settlements on the north coast of Labrador. The Torngat Cooperative’s efforts in the early 1980s is summarized effectively in a thesis written at the time:

The fishing season has been extended, resulting in increased access to UI payments in the off season, and greater access to fisheries, fish processing employment and fishing generated income. The fishing and spiritual resources of the region North of Nain (Saglek and Hebron) have been made available again. Nets have been provided at low cost and Rigolet opened up. Training opportunities have been increased and a shrimp license obtained. New species (turbot) have also been fished and the resources of cooperatives have been accessed...From a history of having very little to say in the main economic aspects of their life, North Labradorians now have an economic vehicle to support the various political vehicles they have developed to enhance their independence (Rennie, 1989, 421).

These findings provide evidence that early regional development objectives of the cooperative and the federal government’s allocation policy were being met:

Torngat realizes that it is not only harvesting a fish resource but also building a better social fabric in northern Labrador and will take every advantage for cultural exchange potential (Torngat Fish Produce’s Co-operative 1982b, 22).

Despite the positive impact of these developments in terms of employment and social development, the Torngat Cooperative was unable to sustain all of its social development initiatives, some of which generated little or no income, nor all of its fisheries operations, some of which were drawing on shrimp revenue more than others to remain viable. Through the 1980s it was forced to scale down its development operations, including the north of Nain fishery. As the first manager of the Torngat Cooperative noted, there was an enormous challenge in meeting social development goals while at the same time generating revenue: “We are striving to maintain the social benefits of the northern fishery (i.e. Nain), as well as to break even. There seems to be no way to do both” (Cited in Rennie, 1989, 18.).

The early period of the Torngat Cooperative was characterized by a phase of rapid expansion and investment, and experimentation, followed by a period of targeted withdrawal in response to organizational imperatives to break even financially and dramatic shifts in local fish resources. An important change from the late 1980s and early 1990s was an increasing focus on the economic sustainability of the Torngat Cooperative, and an emphasis on diversifying its fishery portfolio following the decline, and in some cases closure, of key fisheries. We examine this transition in more detail below.

5.2.2 Resource crisis and fisheries diversification

During the late 1980s and early 1990s, fishery development in Nunatsiavut faced a critical challenge associated with dramatic declines in local fish stocks. While the northern cod collapse in Newfoundland happened in the late 1980s and early 1990s, with the moratorium declared in 1992, the decline of cod along the north Labrador coast happened much earlier. Indeed, the 1992 moratorium on northern cod harvests was in some ways meaningless to Nunatsiavut fishery interests because local stocks had declined much earlier. The two other important fish species caught along the Nunatsiavut coast – Atlantic salmon and Arctic char – were also experiencing significant declines. Atlantic salmon stocks across Atlantic Canada had been in decline since the 1950s. During the 1970s and 1980s commercial production was progressively terminated across Maritimes. While commercial production was still permitted in Newfoundland and Labrador during the 1980s, continued weakness in the stocks led to a moratorium on commercial production in Newfoundland in 1992. Salmon stocks in Labrador have always been relatively healthier than they were in Newfoundland and other parts of Atlantic Canada, which allowed Labrador commercial harvesters to continue to catch salmon after 1992. The reprieve for Labrador commercial harvesters was, however, short lived: in 1994 the moratorium on commercial harvesting of salmon was extended to Labrador. Unfortunately for commercial harvesters in Nunatsiavut, the moratorium on salmon also restricted commercial harvesting Arctic char, which could not be harvested without catching salmon as bycatch. In this way, the ban on commercial Atlantic salmon harvests was also effectively a ban on Arctic char.

The decline of northern cod, and the moratorium on Atlantic salmon, had a devastating impact on fish plants and feeder plants on the Nunatsiavut coast. The small plants or feeder facilities at Rigolet, Postville, Hopedale and Davis Inlet were forced to close in the face of these dramatic changes in fish resources. The decline in fish resources also affected the larger and more established plants at Makkovik and Nain. Our research participants indicated that the Makkovik plant, during this period, was operating at only 10 percent of its capacity and was clearly not sustainable from an economic point of view: “Operating the Makkovik plant with no cod and a little bit of salmon and char wasn’t going to work with a plant that was supposed to do millions of pounds of fish” (Interview 0015).

The management and employees of the Torngat Cooperative played a key role in responding to this critical challenge facing Nunatsiavut’s coastal fishery. Its efforts were focused on developing new commercial species to replace northern cod and Atlantic salmon/Arctic char that could be processed at the Nain and Makkovik plants. From the late 1980s the Torngat Cooperative was able to purchase turbot caught offshore by Newfoundland based boats. They convinced boat owners that it made more sense to deliver fish to the plant based at Makkovik rather than ship it to a processing facility in Newfoundland. By the mid-1990s the Makkovik plant was processing turbot from at least 30 boats fishing off Nunatsiavut’s coast (Interview 0015).

A second new commercial species – snow crab – was developed from the mid-1990s. Commercial harvesting of snow crab by Newfoundland and southern Labrador based vessels emerged in the mid-1980s along the northeast coast of Newfoundland and along the southern coast of Labrador (Coombs et al. 2010). By the mid-1990s commercial catches in southern Labrador were significant and this fishery supported a relatively large number of licence holders, as well as a crab plant at Cartwright in southern Labrador. Crab harvesters along the Nunatsiavut coast were restricted to the zone south of 54° 40’. When existing crab harvesters requested that this line be moved further north, and adjacent to Nunatsiavut, the Torngat Cooperative together with the Labrador Inuit Association opposed this proposal

because it was adjacent to Nunatsiavut fishing interests. In order to demonstrate the existence of a sustainable resource that could be caught by Nunatsiavut interests, the Torngat Cooperative requested and was granted a 100t exploratory licence for snow crab in 1997 in a region known as 2J North. The organisation leased a boat and successfully fished snow crab for several years. The success of this exploratory licence paved the way for a larger communal licence of 500t allocated to the Labrador Inuit Association in 1999 (Coombs et al 2010), which in turn enabled the development of an inshore crab fishery. The development of a new source of fish harvesting and processing has been a crucial factor in the sustainability of the Makkovik plant: not only did it provide additional raw material to keep the plant going and local workers employed, it was also a very lucrative species that generated significant profits for the Torngat Cooperative.

From the early 1990s the Torngat Cooperative successfully transitioned from cod and Atlantic salmon to turbot and snow crab. This shift did not occur through good fortune. On the contrary, it required hard work and vision, especially from managers and employees of the Torngat Cooperative who saw the need to transition to new commercial species. While these new fishery development activities created new sources of income for the cooperative, research participants stressed that the development of crab and turbot fisheries would still not have been possible without the royalties generated from northern shrimp licences. In other words, northern shrimp royalties during this period were crucial in achieving a transition to new fish resources that provided opportunities for fish harvesting and processing activities on the Nunatsiavut coast.

5.2.3 Employment: Offshore vessels

The agreement between offshore license holders, like the Torngat Cooperative, and companies with offshore fishing boats typically involved specific details on royalty payments as well as a commitment from the company to hire a number of employees linked to the license holder. In the case of the Torngat Cooperative, companies with offshore factory freezer trawlers agreed to employ a specific number of people from the Torngat Cooperative's membership. According to research participants, the number of individuals hired on offshore vessels has varied over time. At its peak in the 1980s and 1990s there were as many as 30 individuals on rotational contracts. The contracts for these individuals included cost of travel to and from the vessel and hotel accommodation. Salaries were high with some research participants suggesting that individuals could earn up to \$120,000 a year working on an offshore shrimp trawler. For some, working on a shrimp boat provided a way of achieving specific financial goals. Many individuals used offshore work as a way of building financial security relatively quickly, helping them in purchasing a house for example, before moving into land-based jobs.

The decline of shrimp prices in the 1990s, however, resulted in the contracts becoming less attractive to members of the Torngat Cooperative. According to several research participants, salaries have declined and companies have withdrawn the practice of covering travel and accommodation to and from vessels. Furthermore, with the expansion of land-based resource development such as Voisey's Bay nickel mining operation, many potential offshore shrimp workers found work on land (Interview 0012). As these individuals were accustomed to being away from home and family for lengthy periods, employing someone with offshore experience was attractive to mining companies that also used rotational scheduling:

Voisey's Bay came on, and a lot of those shrimp workers went to work at Voisey's Bay because they were good reliable workers who didn't mind being away from home. The companies snapped them up, right? Yeah, they got work. If you had on your resume that you worked on a

shrimp vessel for the last four years, they knew, 'Okay, you can handle being away from your family and you've adjusted to that, you know.' [Interview 0014]

The underutilization of offshore employment opportunities is a surprising finding. Currently there are opportunities for up to 30 positions on offshore vessels linked to the license held by the Torngat Cooperative and the license held by Pikalujak Fisheries Ltd.. In 2014 there were 10 applications from Labrador residents for work on boats, and in 2015 there were 8 individuals working on offshore shrimp trawlers. While offshore factory trawlers have had difficulty in recruiting crew, research participants indicated that conditions were changing with higher prices for shrimp, and fewer land based employment positions. The degree of utilization of offshore employment opportunities thus is both a concerning challenge (raising questions as to why the opportunities are underutilized, a question that is beyond the scope of this current research even though we have identified some of the reasons) and an opportunity.

5.2.4 Current and new fishery development initiatives

Yeah, but we have very few fishers in the offshore. That's the first problem, so this [fish plant in Makkovik] was a way to employ local Inuit from our communities because they weren't being employed offshore, didn't want to go offshore, so this was a way to keep a percentage of these dollars back into our communities, and allowed them... like, fishing is seasonal, so it allowed them to, I guess, make enough weeks to qualify for EI, so it could sustain them over the winter too, right, so that's what a lot of them want, really, when you look at it, but... so we have a social conscience too in the Nunatsiavut government to try to bring as many benefits to our communities as we can, and we see seasonal work as one of the few options they have in the communities now, and the fishery is only to help that, right, so that's kind of our thinking, really; but not only that, though, not with shrimp but certainly with crab and turbot, but fishing it inshore... it's delivered to our plants in Makkovik, and they sustain those number of employees for two or three months in the summer [Interview 0013].

During the early 1980s, the Torngat Cooperative's approach to fishery development involved investing in inshore fishery development across the entire coastal zone from Davis Inlet up to Nain and beyond. As we noted earlier, some of the economic and social development initiatives proved difficult to sustain for financial (insufficient or no revenue generation from some activities) and ecological (declining fish resources) reasons even with the considerable income generated through royalties generated from the offshore shrimp license, which helped subsidize other operations. Our research participants also indicated that the Torngat Cooperative's Board demanded that the organization focus on financial sustainability and, where possible, generating revenue. Nevertheless, after more than three decades in operation, the Torngat Cooperative continues to provide substantial economic benefits to Nunatsiavut, with its shrimp allocations providing a critical source of its strength. Moreover, the offshore shrimp license granted to Pikalujak Fisheries Ltd. and the Special Allocations of shrimp granted to the Nunatsiavut Government have subsequently generated new sources of a range of economic benefits for the people of the region. In the sub-sections that follow we examine various ways in which shrimp licenses and Special Allocations have been used for socio-economic development in Nunatsiavut.

5.2.3.1 Nain plant

The seasonal operation of the Nain fish plant was taken over by the Torngat Cooperative in 1995. Since then it has leased the land and property of the plant, and has also invested in upgrading the plant

infrastructure through revenues from the offshore shrimp license and government partnerships. When the Torngat Cooperative took over the Nain plant, it was processing Arctic char and Atlantic salmon. The 1996 moratorium on commercial salmon harvesting in Labrador led to the end of salmon harvesting at the plant.

A notable development associated with the Nain plant has been the recent efforts to revitalize the Arctic char fishery by growing the volume of char and improving the quality of production (Beale et al 2011). This fish species is economically important to local residents and also has important food security and cultural significance to coastal communities in Nunatsiavut as part of the subsistence food system for northern peoples. There are also new initiatives aimed at exploring the possibility of exploiting new fish species around Nain, including whelk and scallops.

The effort to revitalize the Arctic char fishery has been coordinated by the Torngat Cooperative, with the assistance of an external consulting agency, and the financial support of the provincial Department of Fisheries and Aquaculture, and the Nunatsiavut Government (through the Department of Education and Economic Development), and the National Research Council. Much of the recent effort has been guided by a consultant report produced in 2014, which recommended new equipment, new marketing efforts, and alternative harvesting strategies to produce better quality fish. In 2015, new processing equipment was purchased for the plant including a fish header and a new filleting machine that produces high quality fish fillets more efficiently and quickly than existing methods used. In addition, a new smoker was purchased to improve the quality of the final product. Marketing initiatives have included new attractive packaging and promotional material aimed at highlighting the high quality of this wild caught fish that is harvested using traditional methods and has exceptional taste. Finally, there are efforts underway to improve harvesting methods including using traps or long lining, mainly to prevent fish flesh from being damaged using nets (Hardy 2015). The Department of Fisheries and Oceans sets annual total allowable catches. In 2015 the total allowable catch was 77 metric tonnes distributed through three sites: Okak, Nain and Voisey.

In 2015 a total of 13 fishers were involved in the Arctic char harvest using small boats, and the plant at Nain employed 29 workers on a part time basis over the season. Efforts are underway to lengthen the season for both harvesters and plant workers through a scallop fishery. These efforts involve collaboration between the Torngat Cooperative and the Nunatsiavut Government, with the support of Memorial University's Marine Institute. The goal is to develop a fishery that can be prosecuted using speedboats to ensure that local community members are not excluded by the high costs of larger vessels.

5.2.3.2 Makkovik plant



Entrance to the Makkovik crab/turbot processing plant, August 2015

Photo Credit: Paul Foley

The Makkovik fish plant has, over time, become the most economically significant processing facility on the Nunatsiavut coast. In the 1980s and early 1990s, cod, char and salmon were the main fish species processed at Makkovik, but since the mid-1990s the focus has shifted to turbot and to snow crab. An initial snow crab quota of 100t was allocated to the Torngat Cooperative in 1997, and this amount was increased to 500t in 1998. The LIA/NG was also allocated 500t of quota in 1999 in response to positive scientific advice on the snow crab stock, and in recognition of DFO's commitment to both adjacency and the support of Indigenous interests in fisheries. These quotas are allocated to the NG, which re-allocates shares of the overall quota to members and beneficiaries who use boats that they lease or own. All of the snow crab is processed at the Makkovik plant (Table 3).

The snow crab fishery in Nunatsiavut, which was developed in part with the support of offshore shrimp royalties, is a crucial complementary income source to shrimp for the Torngat Cooperative:

The snow crab fishery is the only real fishery that has the capability of becoming profitable on the north coast. We've not done it with turbot, so, for example, we ran Rigolet, which is...salmon and char, small boat fishermen, Hopedale, Postville and Makkovik before snow crab in the late 90s. For 20-plus years we ran and operated all those facilities, which is being one hundred percent subsidized by the offshore shrimp license, because the only time we made money in the fish plant was when we got at crab. [Interview 0015]



Inside the crab processing plant facilities in Makkovik, August 2015

Photo Credit: Paul Foley

As this research participant argued, snow crab plays an exceptional role in that it can be a self-sustaining fishery, enabling it to support shrimp revenues in the cross-subsidization of other parts of the fishery in Nunatsiavut that do not generate enough revenue to break even. For the Nunatsiavut Government, as discussed further below, the crab fishery is also a cornerstone in its fishery development strategies, particularly in its effort to expand the number of beneficiaries participating in inshore harvesting. The crab fishery, moreover, provides an important example of the collaboration and coordination between the Torngat Cooperative and the Nunatsiavut Government in advancing social and economic development in the region.

The Torngat Cooperative and Nunatsiavut Government were also allocated turbot quotas, a proportion of which have been processed at the Makkovik plant. The Torngat Cooperative has in the past attempted to fish its own quota by leasing a vessel (Nain Banker), but this strategy has been a logistical challenge. Quota that is not landed by either the Torngat Cooperative or the Nunatsiavut Government is allocated under royalty agreements to other companies in much the same way as offshore northern shrimp licenses and Special Allocations are allocated to companies with offshore factory freezer trawlers. Despite these challenges considerable volumes turbot continue to be processed, mainly at the Makkovik plant, and new investments in processing technology are in the works for this facility.



A pallet of processed turbot ready for shipment at the Makkovik plant, August 2015

Photo Credit: Paul Foley

Processing data provided by the Torngat Cooperative provide a long term overview of production levels for the three key species (crab, turbot and Arctic char) (Figure 3), as well as earnings and employment figures (Figure 4). The data reveal how the Torngat Cooperative was able to diversify from northern cod and Atlantic salmon into snow crab and turbot, and it shows its ongoing efforts to sustain an Arctic char fishery. Figures on employment earnings also reveal the significant incomes that have been earned by the membership of the Torngat Cooperative over the period of its existence. As our research participants have stressed, none of this would have been possible without the royalties that were earned through northern shrimp licences and Special Allocations.

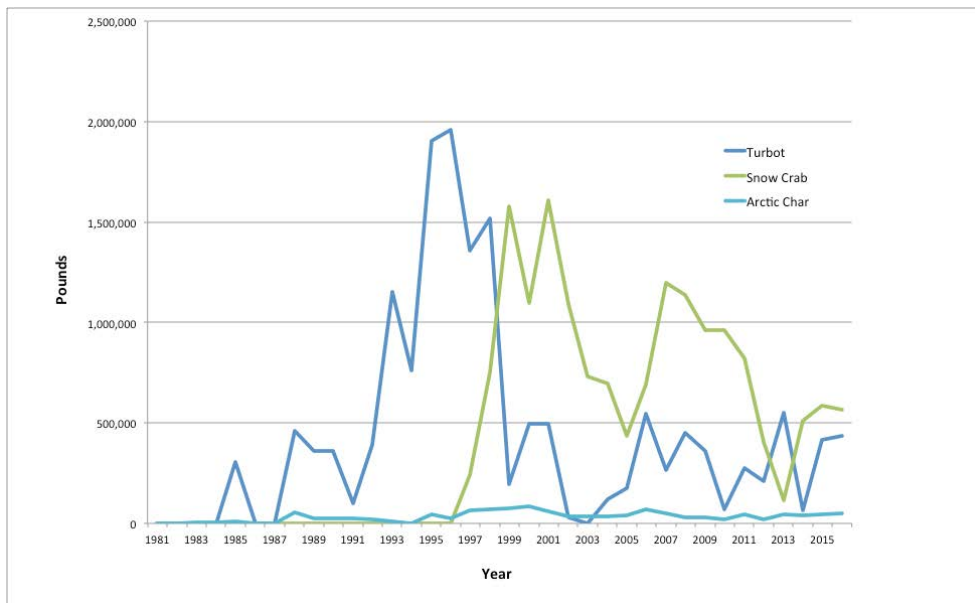


Figure 3: Production of fish at Torngat Cooperative facilities in Nunatsiavut
Source: Torngat Cooperative

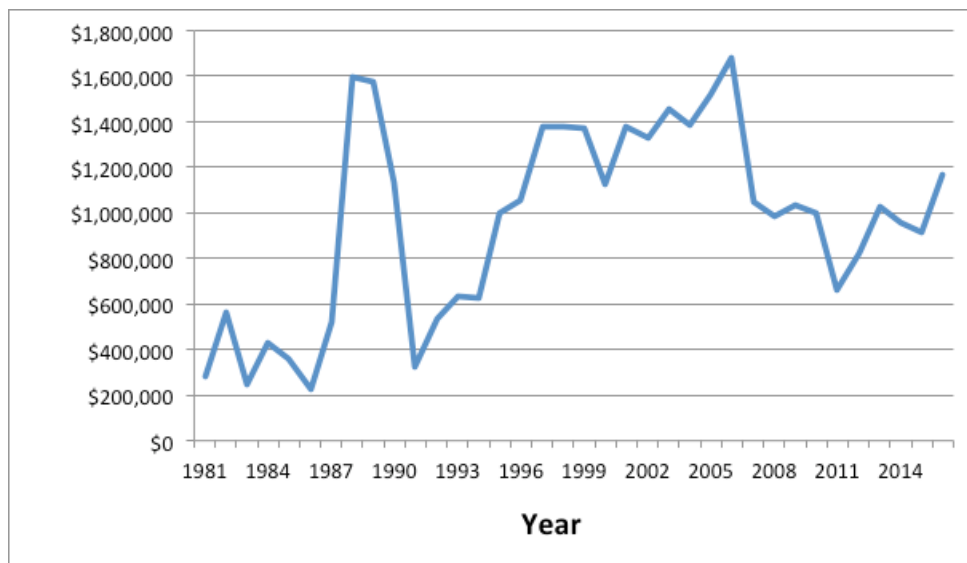


Figure 4: Income earned by Torngat Cooperative members 1980 to 2016
Source: Torngat Cooperative

5.2.3.3 Feeder plants

The feeder plant system was an important way of supporting fishery development right up and down the Nunatsiavut coast. It ensured that all of the coastal communities were served directly – in the early years Torngat Cooperative committed itself to serving all communities – and provided employment within those communities. However, the moratorium on Atlantic salmon and northern cod made it impossible to run feeder plants along the Nunatsiavut coast. As Coombs et al (2010, 7) note, “fishing and nominal processing operations in the communities of Rigolet, Postville and Hopedale are now negligible.” Thus, while the Torngat Cooperative’s early policy was to spread resources as widely as possible along the coast, its most recent efforts have focused on primarily on Makkovik and to a lesser extent on Nain. The

development strategies of both the Torngat Cooperative and the Nunatsiavut Government pertaining to onshore processing have shifted towards supporting inshore harvesters to supply these plants.

5.2.3.4 Designate program and communal allocations

The designate program has its origins in a 510 tonne allocation of northern shrimp was granted to LIA/NG in 1997 for SFA 5 by DFO for the benefit of inshore fishers in Nunatsiavut. The Nunatsiavut Government initially received royalties from offshore partners who caught the quota but it currently manages this allocation as a communal quota. Most of the northern shrimp quotas held by Nunatsiavut interests have, in the recent past, been re-allocated by those Nunatsiavut interests to offshore companies in return to royalty payments. In the early 2000s, however, the LIA developed a beneficiary⁴ designate program whereby registered beneficiaries of the land claim agreement who are also inshore harvesters/fishers are allocated a portion of its Special Allocation, which is transferred into a federally recognized communal license for the purposes of the designate program. The justification, as one of our research participants explained, was so that shrimp could be caught by a local Inuk in the inshore fishery rather than caught by offshore companies in exchange for royalties returned to the Nunatsiavut Government:

The reason why it was converted to a communal license was that the LIA wanted to fish the quota themselves. Through a Special Allocation, they had to transfer the quota to an existing [offshore] license holder to fish for them, so having a Special Allocation without a license, you can't fish it yourself. Having a communal quota attached... has a license with... you know, you can designate beneficiaries. [Interview 0019]

Over time, then, the government decided the quota would better serve inshore fish harvesters, partly because fewer people in the region work in the offshore sector than in the past. Engagement by beneficiaries has been more limited than the Nunatsiavut Government hoped until recently. For example, beneficiaries received between 125 and 180 tonnes in 2011 (Coombs et al 2011: 25). Recent increases in engagement have been linked to the decrease in availability of quotas for southern harvesters, some of which have leased vessels to Nunatsiavut designate harvesters in return for a percentage of the income (Coombs 2010). If shrimp is not fished by an inshore sector designate vessel in the Fall, the remaining portion is transferred offshore, either through Pikalukjak or Torngat Cooperative. Priority access is to beneficiaries who are vessel owners.

The designate program is currently coordinated through the Nunatsiavut Government's Ministry of Lands and Natural Resources. From a regulatory point of view, the Nunatsiavut Government is able to transfer Special Allocations to a communal license through the Aboriginal Fisheries Strategy. This conversion of the Special Allocation quota into a communal license allows the Nunatsiavut Government to designate up to 14 beneficiaries access to northern shrimp under communal licenses [Interview 0013]. Although the number of beneficiaries varies from year to year, the government normally designates 12 or 13 shrimp harvesters who operate between 7 and 9 vessels. According to interview participants, the amount of quota it currently manages justifies 12 to 13 beneficiaries, who are required to hire at least one additional beneficiary as crew on the vessel. If applicant beneficiaries indicate that they will employ two or more beneficiaries as crew, they may be allocated additional quota, a provision that is designed to enhance incentives for generating employment in the region. The program has helped develop notable increases in inshore northern shrimp harvesting activities from Nunatsiavut beneficiaries (Table 5). With

⁴ In this context, beneficiary refers to individuals registered as beneficiaries of the Labrador Inuit Land Claims Agreement.

each of the 12 to 13 designates hiring a minimum of one additional crew, as many as 32 people benefit from the designate program [Interview 0019]. Our research participants indicated to us that the demand for quotas among land claim beneficiaries far outstrips the supply of designates available in the program each year.

Table 5: Northern Shrimp Landings, <65” Shrimp Catches in SFA5

Year	Landings (tonnes)
2007	21
2008	94
2009	0
2010	380
2011	1193

Source: Coombs, 2011

The impact of the designate program, as one research participant explained, needs to be situated in the social and environmental context of Nunatsiavut. In this context, the beneficiary program is a very significant employer and provider of employment and income opportunities in the multi-species inshore fishing sector:

You know, if you look at a boat owner employing five or six beneficiary crew, that’s a lot of work. In an area where unemployment is very high, seasonal activities are still by and large the main employer in [the region] because six months of the year we can’t fish because of ice conditions and things like that, so seasonal employment is still one of the biggest employers, and the commercial fishery is a seasonal employer, so every opportunity to increase employment either through our harvesting capacity or through additional quotas is very important to us and to our communities [Interview 0019].

Our 1560-tonne overall quota right now in Areas 4 and 5 provide employment to approximately 30 to 35 beneficiaries. They make very good incomes from the northern shrimp fishery, and the overarching goal for our fund that we’ve had in place for the last three years is to help us to build our own harvesting capacity in the commercial fishery, not just the northern shrimp fishery [Interview 0019]

The criteria for designate status, and a communal license, include: being a beneficiary of the Nunatsiavut land claim, having inshore commercial harvester status, and beneficiaries must demonstrate having access to a suitable boat to fish for shrimp. Some qualified beneficiaries lease vessels from boat owners in southern Labrador, which has become somewhat easier with quotas in southern regions experiencing significant cuts to shrimp quotas in the recent past.

Significantly for fisher designates, the Nunatsiavut Government also has a 310 tonne allocation of snow crab for 2JNorth that is processed in Makkovik in the processing facilities operated by the Torngat Cooperative. This 310 tonne allocation – together with an additional 40 tonnes of crab quota from the Torngat Cooperative – is distributed to designate beneficiaries, most of who also have shrimp allocations. A small turbot quota (around 190 tonnes) is also, where possible, allocated to designates.

This ability to allocate multiple species to individual designate inshore fishers allows the Nunatsiavut Government to facilitate economically sustainable inshore harvesting operations.

The promotion of local ownership of inshore vessels has been a notable challenge for the Nunatsiavut Government, though some beneficiaries prefer to avoid the risks and burdens of ownership. Only one designate owns his own vessel and many individuals are frustrated with the constraints obstructing ownership, such as financial constraints. The remaining designate beneficiaries either lease vessels or are employed as crew. The leasing arrangement suits some designates who are comfortable making a living through leasing vessels or working as crew:

They're making a living at that, and they have the winter off where they can go hunting on the land and cutting wood in the winter for the next year, and they need to do all that too, right, so they're happy doing what they're doing. [0013]

Another research participant explained:

Some of them, our designates are very gung-ho. Some of them are more reserved... They're very familiar with leasing... you know, they walk on a vessel. Five weeks later they walk off... you know, they have this intense work period, and then they have the rest of the year to pursue their traditional activities, so there's benefits on both sides. It's not a cut and dried of everybody want to be a boat owner. You know, that's not the case. As Labrador Inuit... you know, the beneficiaries also like to pursue their traditional lifestyles, and this short, intense fishing activity helps them to support doing that for the remainder of the year, so there's benefits and, you know, things to look at from both sides of the coin, I guess, if you want to call it that, yeah, but not everybody wants to be a bullhorn. [Interview 0019]

The designate program is currently designed to allow beneficiaries to fish for shrimp and other species through a leasing arrangement. Yet the Nunatsiavut Government and fish harvesters have initiated new arrangements that seek greater involvement by local fishers in the inshore shrimp harvesting sector. For example, there is one case where a designate has started a lease-to-purchase arrangement with a southern vessel owner. Through this arrangement the beneficiary will eventually own the inshore vessel.

These new arrangements, where designates may eventually own a vessel, puts pressure on the Nunatsiavut Government's role in fishery development in two ways. First, it puts pressure on the Nunatsiavut Government's approach to communal license allocation. Communal shrimp licenses are currently allocated to maximize the number of designates. In other words, the approach is to have as wide an impact as possible:

So we have a strong social conscience in terms of designating our beneficiaries. We try to accommodate as many as we can, yeah, and maybe that's the problem. You know, we're not business minded in terms of giving a person more than they can fish in the hopes they'll get a vessel, that kind of way... But where we're going now with these reports we're getting from [consulting firm] and wanting to increase our harvesting capacity, we're going to have to make more business-minded decisions to reflect that too. You know, that's the new reality. [Interview 0019]

As this research participant suggested, this approach to communal licenses is being reconsidered in a context where some designates are keen to gain a more secure foothold in the inshore shrimp sector

through vessel ownership. These more ‘gung-ho’ beneficiaries are requesting larger quotas for their communal licenses to support their goal of eventually owning their own vessel. To address the dilemma of either distributing diminishing quota to a large number of applicants or distributing higher amounts of quota to fewer applicants to provide greater economic security to those applicants, the Nunatsiavut Government seeks to secure additional quotas on an ongoing basis.

There is a second challenge facing the Nunatsiavut Government from designates who hope to become more involved in the inshore fishery sector. Currently, the quotas from communal licenses are allocated to beneficiaries on an annual basis, which does not allow beneficiaries to use these licenses as collateral when seeking support from a financial institution for purchasing a vessel. In other words, without a secure, permanent fishing license, beneficiaries are unlikely to be successful in securing traditional sources of financing to purchase a suitable inshore boat. This situation also affects the (currently) only beneficiary who owns an inshore boat: while he is considered to be a model beneficiary because of his experience in the inshore northern shrimp fishery and because of his practice of hiring all beneficiary crew, his boat is worth much less than inshore fishers in the south who do not rely on the communal quota/designate system to gain access to quota. The yearly allocation of quota to beneficiaries from communal licenses has, as a result, created frustration among some beneficiaries about what they perceive as the communal, government ‘owned’ nature of the allocations. The fact that individuals do not own the assets they fish under is recognized by the Nunatsiavut Government, which is actively pursuing options to help beneficiaries who want to become boat owners. To this end, the Nunatsiavut Government is exploring the possibility of designing a multi-year designate allocation system as a way to enhance security in resource access for beneficiaries who are seeking financing for purchasing or leasing vessels.

5.2.3.5 Fishery Development Fund

Until recently there has been no dedicated fund to support inshore fishery development in Nunatsiavut. This has changed with the Ministry of Lands and Natural Resources’ introduction in 2011 of a fishery fund to provide additional resources to develop the Nunatsiavut inshore fishery. In addition to facilitating inshore fishery development through the allocation of quotas in the designate program, the Nunatsiavut Government decided to use its communal license and designate program as a finance generating mechanism and combine it with other sources of income to form a Fishery Development Fund. The fund is sourced through three separate mechanisms. The first is tax returns from the Federal Government from fisheries income earnings from Nunatsiavut residents. The Nunatsiavut Government receives a rebate of some of the income tax paid by local fishers to the federal government. The second mechanism is through an arrangement with the Charlottetown shrimp processing plant owned by the Labrador Fishermen’s Union Company (LFUSC). The Ministry encourages designates fishing under communal licenses to deliver shrimp to the Charlottetown plant, and in return the LFUSC pays the Nunatsiavut Government five cents on every pound of shrimp. In 2016, the Ministry made it a requirement to land shrimp in Charlottetown. The third source of funds is a tax on beneficiary designates, who are required to pay the Nunatsiavut Government 2 cents per pound of any allocation from licenses and quotas, with the objective to reinvest the accumulated funds back into fishery development initiative.

The idea for the fund was first proposed by Ron Johnson of the Torngat Cooperative, who had experience in the issues faced by fishers in Nunatsiavut.⁵ While the designates program aimed to benefit individual fish harvesters, the idea of a fund for the Nunatsiavut Government development efforts

⁵ Johnson was also able to find a legally sanctioned way for the Nunatsiavut Government to deduct the fund from fishers.

provided an option for generating a general approach to supporting fisheries development, rather than rely solely on designate program. After consulting with different groups within government and despite some pushback from some fish harvesters concerned about the proposed tax/fee associated with the allocation of designate program quotas, the Fishery Development Fund was introduced in 2011 and has been accumulating funds ever since. By August 2015, the fund had accumulated over \$1 million. The Nunatsiavut Government is currently considering guidelines and policy on how to use those funds, exploring options that might best benefit inshore fishery development and beneficiary fish harvesters. Options include, but are not limited to, providing assistance purchasing enterprises and equipment.

5.2.3.6 Non-fishery related investments

Royalties from northern shrimp licenses and Special Allocations have also been used to support non-fishery related developments in Nunatsiavut. For example, this is the case for the revenues generated through the shared license initially allocated to the Labrador Inuit Development Corporation (LIDC) and its southern corporate partner in 1987 under Pikalujak Fisheries Ltd., and through subsequent Special Allocations granted to the LIA/Nunatsiavut Government in the 1990s and early 2000s. Investments in non-fishery related development initiatives were initially made by the LIDC. These development initiatives included establishing the 10-Mile Bay dimension stone project near Nain, a second stone quarry near Hopedale, firewood delivery programs for northern residents, and various real estate investments. When these and other investments faced financial challenges in the early 2010s, the LIDC was replaced by a new, more business oriented structure called the Nunatsiavut Group of Companies (NGC). While the LIDC was run on a not for profit basis, the NGC is a for-profit structure with several subsidiaries.

The NGC remains administratively separate from the Land Claims Agreement, and formally independent from the Nunatsiavut Government. However, the assembly of the Nunatsiavut Government appoints the board of NGC. The mission of NGC is “To create wealth in trust for Nunatsiavut Beneficiaries by owning profitable, sustainable businesses” (Thorbourne 2013). Revenues from the Pikalujak Fisheries Ltd. offshore shrimp license continue to support the general operations of the NGC, which in turn benefits Land Claim beneficiaries through employment opportunities and services. The NGC’s fishery interests include northern shrimp licenses and allocations, crab and turbot quotas and a long liner vessel.

5.3 Challenges and Opportunities

5.3.1 Fisheries development in Nunatsiavut

The task of developing a financially viable commercial inshore fishery in Nunatsiavut is more challenging than is the case in other parts of Atlantic Canada. Long distances to markets, the short fishing season, the impact of sea ice for several months of the year, the unreliability of transport networks that are subject to periodic breakdown, and adverse weather all pose challenges to those involved in the Nunatsiavut fishery. These challenges were recognised early on by the Torngat Cooperative:

The main problem in Labrador and the biggest obstacle to development is the extreme seasonal nature of the plants in northern Labrador. From mid-November to late June, the plants are inactive due to ice conditions which prohibit inshore and long-liner fishermen from putting gear into the water. As a result the plants closed. Under present conditions, the operating months for a

plant in northern Labrador amount to 4 at the most (i.e. July, August, September, October). (Torngat Fish Produce's Co-operative 1982b, 9).

Our interview participants confirmed the challenges and risks of fishing in this region compared to other parts of Atlantic Canada:

When you're fishing off the coast of Labrador, you're not fishing off Nova Scotia where you've got bays...and it's a lot different in terms of weather patterns and in terms of the sea. In Nova Scotia you can have a 25-foot skiff and go out and fish lobster and do some snow crab and scallops and do all that. You can't do that on the north coast. You leave that point outside Makkovik and you'd better have a boat that you can survive in, and that's not a 34' 11 anymore [Interview 0015].

Besides the weather and sea ice, there are added expenses involved in running commercial fishery operations on the north Labrador coast, which explains why some commercial operations in southern Labrador, notably at Black Tickle, have shut down:

It is more expensive to operate along the coast: People don't know the cost and expense of operating on the coast...Black Tickle is a prime example. Black Tickle was a perfect location for crab, and Quinlan's pulled out for one reason, and that's just it was getting too costly. The quotas were dropping. They couldn't make the money that they wanted, and they couldn't use it to the advantage they wanted, and that's what you would find on the north coast [Interview 0015].

There are specific reasons that make fishing more expensive along the Labrador coast that are related to transport infrastructure, fish volumes and the way in which markets work. There is the obvious issue of distance, but freight costs are also more expensive from Labrador than they are between other places in the region with similar distances: "It costs more for me to get fish to Lewisporte than it does any other processor to get it to Boston" [Interview 0015]. Freight costs are also higher if overall volumes of fish are lower; there are economies of scale to be gained with large volumes, but with the relatively smaller volumes of fish produced in Nunatsiavut, transporting fish is relatively expensive. Transporting larger volumes of fish also requires substantial freezer capacity. For fish producers like the Torngat Cooperative, which do not have very large volumes or substantial freezing capacity, transporting fish is a major expense. There are additional benefits to fish producers from having larger volumes of fish: it allows producers to negotiate better prices in the market for buyers that are looking for substantial volumes of consistent supply. The smaller volumes of fish produced in Labrador put the local industry in a distinct disadvantage relative to other producers.

Another cost affecting fish producers in Labrador is associated with the holding of inventories. Lean production is considered to be best practice for business operations, which are encouraged to reduce or eliminate any production related inventory. The effect of lean production is cost savings that come from not holding significant inventories over long periods of time. But fish operations on the Labrador coast are not able to achieve lean production because they must hold significant inventory required for fishing and processing operations over the winter so that harvesting and processing can start on time in the spring when the fishing seasons starts. Sea ice conditions in the spring combined with adverse weather mean that it is not possible for fish producers to secure these inventories as the season starts, and so they are forced to bear the costs associated with holding inventories over six or seven months every year. It is not possible to secure these supplies that are crucial to harvesting and processing in the spring due to sea

ice conditions. These are additional expenses that the local industry must carry in order to begin fishing in the spring.

Although the environmental conditions provide challenges to fish producers, there are other variables that are important to consider. For example, while Nunatsiavut is considered to be remote, this did not stop foreign vessels from overfishing northern cod and other groundfish during the 1960s and 1970s, which led to a dramatic collapse of local stocks. While Labrador is remote relative to in-province transportation and to external markets, it has not been necessarily as remote to large fishing boats travelling considerable distance to exploit local stocks.

An additional longstanding concern that directly affects financial viability is the lack of investment that has gone into the processing infrastructure along coast. When the Torngat Cooperative began using the facilities that had been established in Makkovik and Nain, they found that the plants had been poorly constructed, which led to inefficiencies in production and poor quality product:

The plants are just haphazardly slapped together. Whoever designed the plants, I don't know if they were designed. I think they were built on a whim, somebody had an idea, let's build something, we'll build a part here and another part over there. You can't have an efficient, clean flow for the product from the time it's received to the time it's ready to ship, no way [RCEU, 1985].

In the 1980s, the Torngat Cooperative suggested that this lack of investment in fishery related infrastructure was the result of administrative bias in government structures:

While there are a multitude of problems in Labrador, it is felt that often times in the past developmental funds have been scarce due to all these problems. Bureaucrats and others have used the scapegoat of the geographical location, and lack of transportation facilities as a reason for not providing developmental capital. Torngat Co-op feels that this attitude should be set aside and that Labrador and the problems facing it should be looked upon as a challenge to bring in new innovative ideas to overcome some of these obstacles to development rather than the opposite (Torngat Fish Produce's Co-operative, 1982b, 10).

The Torngat Cooperative and other players in the northern shrimp fishery in Nunatsiavut have thus proven capable of overcoming challenges of geography and transportation.

Given the challenging context of commercial fishery development, the approach of the Torngat Cooperative to cross-subsidize across its various interests using shrimp royalties and through more financially lucrative ventures like crab, is an appropriate approach to fishery development in Nunatsiavut. Indeed, while purely profit-oriented commercial ventures may not follow this approach, and may instead jettison units that lose money, our research on northern shrimp in other parts of the province suggests that the social enterprise model of economic development that utilizes cross subsidization is one that has helped sustain coastal communities in the face of difficult environments and challenging market conditions.

5.3.2 Labour in plants and on offshore boats

In addition to supporting the development of employment in the inshore harvesting sector for captains and crew, northern shrimp licenses and Special Allocations have led indirectly to two main types of opportunities for wage labour in Nunatsiavut. The first involves work on offshore vessels that are negotiated as part of a royalty contract with private companies. We noted earlier that as many 30 individuals were working on rotational contracts in the late 1980s and 1990s when prices were high and contracts were very attractive. Less attractive contracts combined with other land based opportunities seems to have reduced the number of beneficiaries willing to spend several months on board an offshore vessel. Yet the opportunities that exist on offshore vessels may, in the short term, generate more demand than in the recent past. One reason is that shrimp prices have increased rapidly in the last few years, largely as a consequence of cuts in quota for northern shrimp. The downturn in Labrador's resource economy may also play a role in making these opportunities more enticing to beneficiaries who previously favoured land based employment over working on a factory freezer trawler.

The second opportunity for wage labour is in the fish plants. As the primary producer along the coast, the Torngat Cooperative is also facing challenges in securing sufficient labour for the operations during the summer months, similar to challenges faced by seafood producers provincially and nationally. Prior to the development of Labrador's mining resource economy, research participants explained, local employment in a fish plant was often considered a relatively attractive proposition:

So, like, a job in a plant was a good job to have. You could make good money, but now it's almost like the bottom of the barrel. You know, you don't... where it's not so consistent now... so we didn't have any labour problems then. [Interview 0014].



Plant worker quarters in the Makkovik plant

Photo credit: Paul Foley

With the development of mining and other resource based activities, working in a fish plant is much less attractive, and fish plant managers have struggled to fill positions during the summer season. One response has been to invest in new equipment to cut down on the amount of labour required. According to some of our interview participants, utilizing technology is not about reducing the existing labour force. Rather, it is meant to redesign production so that it matches the number of people who are willing to work at the fish plant. It may also involve automating some aspects of production so that the existing labour force can be freed up to work in other areas of the plant [Interview 0015]. Investments in

machinery are also a response to an apparent increase in the worker absenteeism, according to one interview participant: “So last year and previous years we’d have 30-odd people, and we’d have five might not show up for different reasons every day, and it would be different five... This year, that five went up to 10 to 15 people every day not showing up to work. So you’re trying to run a crab plant that needs at least 30-odd people, and they got 15, 16 people” [Interview 0015]. Some workers have travelled from other coastal communities along the Nunatsiavut coast to work in the two core Torngat Cooperative plants, but the lack of available rental housing in coastal towns makes it very difficult to accommodate a commuting, temporary workforce.

An additional challenge in the fish plants is that the number of hours offered to individual workers sometimes does not allow them to qualify for employment insurance during the winter. While additional opportunities may be secured later in the season by individuals who need additional hours to qualify for employment insurance, some workers prefer pursuing full-time work opportunities or seasonal opportunities where there is a greater likelihood of working the required number of hours to qualify for employment insurance benefits.

Despite these challenges, fish plants on the Nunatsiavut coast continue to provide a vital opportunity for a relatively significant number of local workers who prefer to work in their own communities. Plans to mechanize some parts of the labour process will ideally lead to a situation where a consistent, though likely smaller, group of workers will process high quality fish under healthy and safe working conditions, while at the same time reaching the number of hours required to qualify for employment insurance. These seasonal employment opportunities have worked well for some individuals who take advantage of the off-season to pursue important traditional activities such as hunting, trapping, and retrieving firewood. Other opportunities could be pursued by local organizations and the Nunatsiavut Government in the area of occupational pluralism, whereby seasonal fishery-based workers engage in work in other occupations or sectors during the off-season.

5.3.3 Land claims and resource access

Before we consider the specific issues around the relationship between northern shrimp and the Labrador Inuit Land Claim Agreement (LILCA), it is important to examine the relationship between Indigenous rights to fish more broadly in Canada. Indigenous groups in Canada typically gain access to fish through three separate, but interrelated mechanisms. **First**, Indigenous groups have gained access to fish through a 1982 amendment to the Canadian constitution, which ‘recognized and affirmed’ the rights of Indigenous groups to fish resources (Harris and Millerd 2010). Constitutional rights to fish for Indigenous groups were loosely defined in the 1982 amendment, and it has been up to the courts to decide how these rights should be ‘recognized and affirmed’. Over time, several well-publicized court cases has shaped the specific way in which the constitutional right to fish has been operationalized in practice. The Sparrow court case, for example, has shaped how Indigenous groups can access fish for food, social and ceremonial purposes. This particular provision has been important to Inuit in Nunatsiavut who continue to have access to a limited amount of Atlantic salmon for food after a 1996 moratorium on commercial harvesting of this species. A **second** way in which Indigenous groups enjoy rights to fish is through the Aboriginal Fisheries Strategy (AFS) that was launched in 1992. The AFS provides a framework, in the absence of treaty rights, for how DFO negotiates access by Indigenous groups to fish resources. The Nunatsiavut Government’s communal licenses, which are used to re-allocate quota to designate inshore shrimp harvesters in Nunatsiavut, is made possible through the AFS framework. The **third** way in which Indigenous groups have defined access to fish resources is through

modern treaties and land claims. Since the late 1970s there have been several very important land claim agreements, including the LILCA, which to varying degrees specify access to fish resources (Douglas and Millerd 2010). The three mechanisms that allow Indigenous groups to secure access to fish resources are, in practice, linked in important ways. For example, formal land claim provisions with regard to fish often rely on constitutional cases like Sparrow to define rights to fish for ‘food, social and ceremonial purposes’. In this way, rights that have already been affirmed through constitutional processes can be included into formal land claims with little debate and contestation.

One of the crucial issues facing Nunatsiavut stakeholders with interests in northern shrimp is the relationship between resource allocation and the LILCA. The LILCA, like many recent land claims agreements, includes specific provisions for access to fish resources. There are two key clauses that are relevant to northern shrimp. First, clause 13.12.7 outlines the conditions under which increases in access to northern shrimp will be shared with Nunatsiavut interests:

13.12.7: If in any calendar year after the Effective Date the Minister decides to issue more Commercial Fishing Licenses to fish for shrimp in Waters Adjacent to the Zone [see “Nunatsiavut Territorial Waters” in the map below] than the number available for issuance in the year of the Agreement, the Minister shall offer access to the Nunatsiavut Government through an additional Commercial Fishing License issued to the Nunatsiavut Government or by some other means to 11 percent of the quantity available to be Harvested under those licenses.

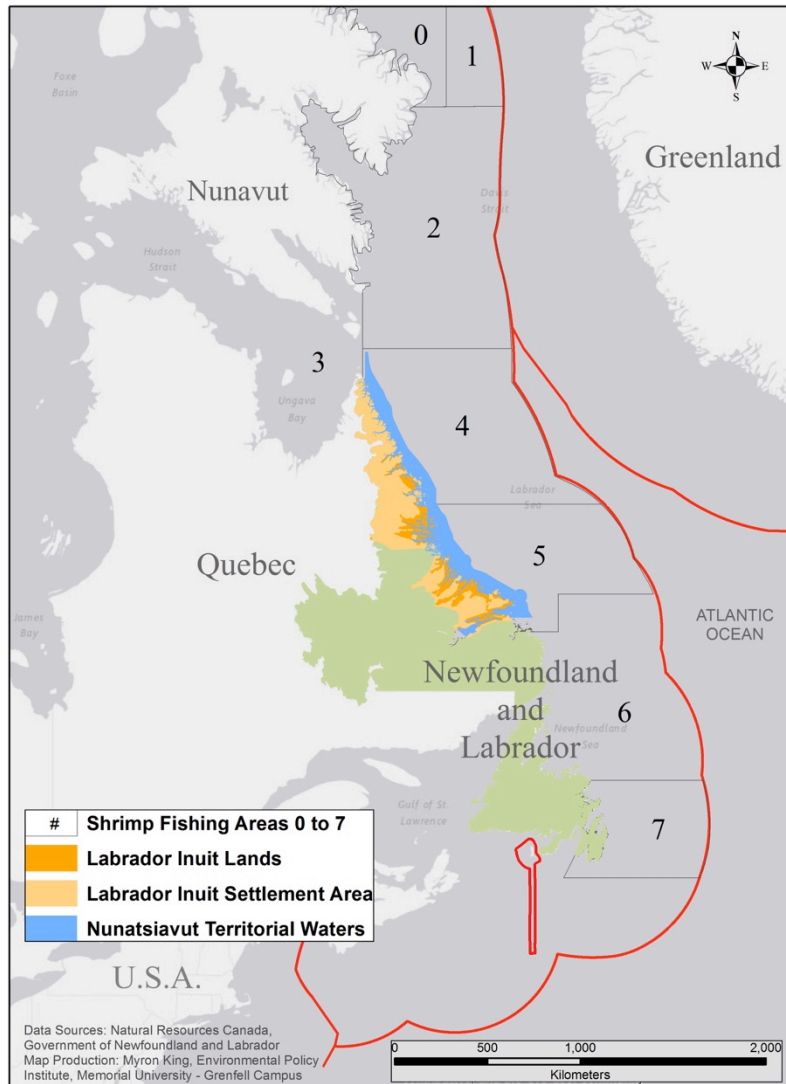


Figure 5. Shrimp Fishing Areas and Nunatsiavut Territories
 Source: Map created by Myron King, Environmental Policy Institute

A second relevant clause provides guidelines for allocation when the system of allocating commercial quotas changes:

13.12.9 If the system for allocating commercial opportunities in relation to a species or stock of Fish or Aquatic Plant changes from the system existing on the Effective Date, the Minister shall offer to the Nunatsiavut Government participation under the new system that is at least as favourable as that set out under sections 13.12.2 through 13.12.8 in relation to that species or stock of Fish or Aquatic Plant.

The LILCA also established new fisheries management institutions in the Torngat Joint Fisheries Board, which was established through the LILCA as a co-management organization for providing fisheries advice to the Minister of Fisheries and Oceans, on fisheries within and adjacent to the Labrador Inuit Settlement Area. The Torngat Secretariat, the implementation agent of the Torngat Joint Fisheries Board, and the Nunatsiavut Government have argued strongly that existing resource access for northern shrimp is not in line with these provisions, and that recent cuts in quotas in Shrimp Fishing Area 5 that have been guided by the controversial ‘last-in-first-out’ policy are contrary to the LILCA. Coombs’ (2010) report on the northern shrimp sector provides quantitative evidence to show the Nunatsiavut Government’s access to northern shrimp adjacent to the land claim area has declined relative to other resource users and is far less than the 11 per cent mandated in the LILCA. For research participants, this study confirms that interests outside Nunatsiavut are disproportionately accessing and benefiting from northern resources adjacent to Nunatsiavut and contributing to a sense that the current distribution of allocation is unfair. For our interview participants, including industry stakeholders and Nunatsiavut Government officials, the relationship between these LILCA provisions and Department and Fisheries and Oceans allocation practice is a source of ongoing frustration and anxiety:

We still do not have certainty even after 30 years of negotiating a Land Claim, and both sides signing to it, we still don’t know what to expect. You know, I see that in my work life as being the most problematic thing...at least if you had certainty...you’re either not entitled to it or you are, at least we’d know. Right now we don’t know what to expect when Canada announces increases (in fish quotas) [Interview 0019].

The uncertainty around access is greater for the Nunatsiavut Government’s Special Allocations because these were granted more recently than the original offshore license holders, including the Torngat Cooperative. With LIFO recently abolished, clarity on allocation policies will be important as groups in the region plan for the development of the inshore fishery over the longer term.

The Department of Fisheries and Oceans, which is responsible for allocation northern shrimp and all other fish resources in Canada, has disagreed with the Nunatsiavut Government’s interpretation of the LILCA provisions as they relate to northern shrimp. These differences in interpretation and reading of the LILCA provisions have been revealed in detail through the Auditor General’s recent report on the implementation of the Labrador Inuit Land Claims Agreement (Auditor General 2015). There are three key differences in opinion relating to northern shrimp. First, DFO has taken a very literal reading of clause 13.12.7 and has pointed out that there have been no new (offshore) licenses for northern shrimp since the last one was allocated in 1991. Since no new licenses have been allocated, DFO argues that its practices are in line with the LILCA. All of the increases in allocation that have happened since 1991 in northern shrimp have been for existing offshore license holders or through Special Allocations. These Special Allocations, DFO has argued, are “outside the context of the agreement (LILCA) and therefore the agreement’s provisions were not applicable” (Auditor General 2015, 11). From DFO’s perspective its allocation practices have not violated the provisions of the LILCA. A second difference relates to how the existing quota held by beneficiaries is calculated. When calculating the existing quota held by Nunatsiavut interests, DFO includes the single license held by the Torngat Cooperative and the half the license held Pikalujak Fisheries Ltd., a company 50% owned by the Nunatsiavut Group of Companies. The Nunatsiavut Government argues that these licenses are separate from its own allocations, and should not count against agreements reached through the land claims process. The final difference in interpretation relates to DFO’s policy for reducing northern shrimp quotas, the last-in-first-out policy. The Nunatsiavut Government argues that the LILCA enjoys constitutional status and should therefore trump the last-in-first-out policy.

The Auditor General's report recommends that the Department of Fisheries and Oceans and the Nunatsiavut Government work to "clarify and agree on the intent of the obligations regarding the Nunatsiavut Government's access to northern shrimp" (Auditor General 2015, 14). If agreement cannot be reached, the parties should use the Dispute Resolution Board, which is a mechanism that exists under the provisions of the LILCA.

The disagreement between the Nunatsiavut Government and DFO raises the question of the relationship between land claims agreements and resource access in this case and beyond. This issue has been the focus of some research by legal scholars (Bankes 2003). While the context of Bankes' study is different in that he is concerned with Nunavut turbot allocations, the conclusions of his research are nonetheless relevant to the challenges facing the Nunatsiavut Government with regard to northern shrimp. The question Bankes addresses is whether the Nunavut Land Claim can provide the basis for what he calls the 're-capturing' of resources lost by indigenous groups. In the case of turbot, he argues that the Nunavut Government and its wildlife management board (the equivalent of the Torngat Joint Fisheries Board), were able to increase their overall access to turbot, but in a context of increases in total allowable catch. In other words, although they were unsuccessful in gaining additional turbot quotas through the reallocation of quotas from existing license holders, they did benefit more than other participants from increases in total allowable catch. Bankes draws a key conclusion from the Nunavut turbot study: he argues that land claims *on their own* will not facilitate changes in resource allocation. Rather, as he writes, "Ratification of a land claim agreement is simply the first step in a *process* of re-capture of indigenous resources...A land claim agreement then provides an *opportunity* for change but that opportunity must be seized" (Bankes 2003, 160). In other words, in the absence of clear provisions regarding resource access under conditions of change, land claims agreements provide the basis on which to begin a longer and more arduous process of resource claims, which will involve both the land claim itself as well as existing policies, like adjacency and historic dependence (two allocation principles already recognized in DFO's integrated fisheries management plan for northern shrimp). In the Nunavut case he points to the considerable work of the Nunavut Wildlife Management Board, which played a key role in motivating for a fair distribution of turbot quota in a context where the total allowable catch was increasing.

Bankes' research has several important additional implications on how land claims in general relate to fish resource allocation. First, even though land claims enjoy constitutional status, they do not, in the case of fish resources, trump the Minister of Fisheries and Oceans' power to allocate and withdraw resources through the Fisheries Act. DFO's response to the Auditor General recommendation that the parties use the Dispute Resolution Board confirms this point. While DFO committed itself to the Dispute Resolution Board, it would do so "while ensuring that the Minister's discretion under the Fisheries Act is not fettered" (Auditor General 2015, 18). In other words, if the dispute resolution process were used, any resolution could not compromise the Minister of Fisheries and Ocean's power granted to him/her under the Fisheries Act. A second lesson from Bankes' research relates to the complexity of competing claims to resources in the rich fisheries of the Northwest Atlantic that not only has vested commercial interests, but also a number of different land claims. In this context, DFO decision making will attempt to balance different interests using its power under the Fisheries Act, and in the context of various land claims and its own stated policies.

5.3.4 Governance and Coordination

An important theme in interviews was the broad question of governance for inshore fishery development and its relationship to northern shrimp allocations. The situation in Nunatsiavut is complex, mainly because of the complex history of allocation, and the number of organizations in the region that have access to northern shrimp licenses and/or Special Allocations.

As discussed earlier in the report, the original offshore license, which was held in trust until the establishment of the Torngat Cooperative, was managed between 1978 and 1980 by the FEPC, an organization that represented the LIA, the LRAC and coastal communities in Nunatsiavut. The FEPC was tasked with establishing a fishery cooperative, which it did in 1980 when it helped establish the Torngat Cooperative. While the cooperative emerged out of Inuit political and economic processes that would eventually lead to the completion of a formal land claim agreement and the government and territory of Nunatsiavut, the Torngat Cooperative was (and is) a separate organization with its own management board, and its own mandate. In addition, its membership includes people from the six main coastal communities including Inuit, Innu and settler groups.

The second (shared) license awarded to Nunatsiavut interests went to a company called Pikalujak Fisheries Ltd., which was partially (50%) owned and controlled by the Labrador Inuit Development Corporation. The LIDC was a not for profit development arm of the LIA, and royalties from the shared license went to support LIDC projects in general rather than initiatives specifically focused on inshore fishery development. While Pikalujak Fisheries Ltd. as a company has remained in place, the LIDC was replaced in 2010 by the Nunatsiavut Group of Companies, a for-profit arms-length agency whose board is appointed by the assembly of the Nunatsiavut Government. While the NGC is a formal structure within the Nunatsiavut Government, it has its own relative autonomy and mandate.

From the late 1990s, Special Allocations were awarded to the Labrador Inuit Association and it has used royalties for regional development projects, as well as initiatives that directly support fishery development in Nunatsiavut. These Special Allocations were transferred to the Nunatsiavut Government when it was formed in 2005 following the ratification of the LILCA.

The complex history of allocation means that there are three separate entities with major northern shrimp allocations in Nunatsiavut: the Torngat Cooperative, Pikalujak Fisheries Ltd. (LIDC/NGC), and the Nunatsiavut Government (Table 2). For one of our interview participants, this situation has in the past hampered efforts to develop the inshore fishery and to coordinate lobbying efforts for additional northern shrimp allocations for the region's development benefit. In the early 2000s, for example, most participants in the industry knew that new allocations of northern shrimp would be made, given scientific advice on the health of the resource. At the time, the Torngat Cooperative and other interested parties began to lobby for additional resources, in part in the hope that they would secure enough quota to support an inshore processing plant. According to one interview participant, it made sense to coordinate the efforts of the Torngat Cooperative, Pikalujak Fisheries Ltd. and the Labrador Inuit Association, but a coordinated effort failed to materialize because the parties were unwilling to join forces behind a single Nunatsiavut approach. For this interview participant, the lack of coordination led to quotas being granted to other groups along the Labrador coast, and it compromised the plan to establish a processing facility in Nunatsiavut [Interview 0020].

After the Nunatsiavut Government was formed in 2005, there were new efforts to coordinate fishery development along the Nunatsiavut coast. The Nunatsiavut Government was keen to establish what was called a 'one fishing entity' for the north coast of Labrador [Interview 0014]. The idea explored consisted of developing or designating such an entity to coordinate and control all northern shrimp

allocations and be responsible for fishery development in Nunatsiavut. A committee was established with representatives from the relevant stakeholders, and a consultant was hired to review the various fishing assets owned in the region and to provide “advice to a review committee on the critical path the Nunatsiavut Government should take to ensure a sustainable and prosperous fishery in the future” (INAC 2009, 18). There were, however, considerable obstacles to establishing a one fish entity. The Torngat Cooperative was, for obvious reasons, concerned that it would be dissolved in a merger of fishery assets and northern shrimp licenses. The license held by Pikalujak Fisheries Ltd., which it shares with a private company (currently Ocean Prawns Canada Ltd.), raised a further challenge as the private sector owners were unwilling to have their share of the license be part of a one fish entity development approach for the region [Interview 0015]. The outcome of the consulting report, and ongoing negotiations, has not led to a one fish entity. However, close discussions between the various stakeholders linked to northern shrimp and to fishery development in Nunatsiavut have continued.

Mutual interest in facilitating inshore fishery development, combined with the effect of the memorandum of understanding between the various northern shrimp stakeholders to encourage coordination, has been most evident in the designate programme. The programme, as explained above, provides individual inshore harvester beneficiaries with access to shrimp quota (and to other fish species) under communal licenses. Selecting designates each year is a process that involves close collaboration between the Nunatsiavut Government and the Torngat Cooperative. As a representative from the Nunatsiavut Government explained:

Torngat is involved. When we get the applications (for commercial licenses) each year, they help us to select the individuals who we designate under our commercial fishery assets, so we work very closely with Torngat on commercial fishery issues in general [Interview 0019].

Ongoing collaboration between the Torngat Cooperative and the Nunatsiavut Government also includes consultation between the Nunatsiavut Government and fishery stakeholders, especially designates. As the representative of the Nunatsiavut Government explained:

Before making any major decisions like that directly affect beneficiaries, we generally consult with them to get their feedback before we do it, so it works very well. It does head off a lot of issues. In 2011 we did... both myself and the director at the time...did community tours before we implemented our commercial fishery designation policy. The access fee we charge to fishers to fish under our licenses came from those consultations. The policy itself, the contents of it came from what we heard in the communities, basically, so, you know, in terms of that consultation process, we see that as being very important before making any major decisions. [Interview 0019].

Based on our research participant interviews, we believe that the MOU represents an important opportunity for pooling expertise and experience in the Nunatsiavut fishery for future development. Historically, the Torngat Cooperative led most fishery development initiatives. It was also responsible for engaging the federal government in efforts to access new quotas, including the crab quotas which it succeeded in securing on behalf of the Labrador Inuit Association [Interview 0015]. In this sense, before the establishment of the Nunatsiavut Government, the Torngat Cooperative had, for many years, spearheaded the promotion of fishing interests in Nunatsiavut at both the provincial and federal level. Since the land claims agreement for the Labrador Inuit was signed in 2005, the Torngat Cooperative has had to shift from dealing directly with the Government of Canada to dealing with fishery policy matters

through the Nunatsiavut Government or the Torngat Secretariat, which has formal co-management responsibility for advising the Minister of Fisheries and Oceans. The advantage of a memorandum of understanding between the Nunatsiavut Government and the Torngat Cooperative is that it brings together formal representation (Nunatsiavut Government) – and a land claim agreement with constitutional status – with the Torngat Cooperative’s many years of experience in fishery development in Nunatsiavut.

Although the commitment to work together on fisheries issues is a positive development, there are challenges that remain in terms of the regional governance and coordination of northern shrimp allocations, and broader fishery development in Nunatsiavut. One of the issues raised in our research was a concern about whether royalties earned through northern shrimp royalties should be used for non-fishery related investments. As one of our research participants noted, “There’s a fair number of people who don’t necessarily agree with that. They think fisheries revenue should be used for fisheries development” [Interview 0014]. These concerns have been heightened in the context of the recent shift from the LIDC, a not for profit development agency, to the Nunatsiavut Group of Companies, a for profit company with the goal of business development. Even amongst research participants close to the Nunatsiavut Government, there appeared to be little knowledge of Pikalujak Fisheries Ltd., or FishCo, the new entity under the NGC that seems to now control most fishery assets of the NG, including licenses and quotas.

A more recent shift in governance within the Nunatsiavut Government promises to play a positive role in fishery development in Nunatsiavut. In the past, fishery development initiatives were coordinated through the LIDC, and more recently through the NGC. There was very little work done within the Nunatsiavut Government on fishery related issues. This has changed with several key appointments within the Nunatsiavut Government and with the development of the Fishery Development Fund, which now provides the government with key resources that can be used to develop the fishery along the north Labrador coast. The ‘fishery file’ now has a visible presence within the Department of Lands and Natural Resources under the Directorate of Renewable Resources. There is now dedicated capacity – both in terms of human resources and financial funds – to provide new energy into fishery development. Ideally, this new capacity within the Nunatsiavut Government will facilitate coordination with other fishery role players, including the Torngat Secretariat, the NGC and the Torngat Cooperative.

5.3.5 Resource variability and sustainable resource use

Nunatsiavut fishers have considerable experience with dramatic changes in the health of local fish resources. They experienced the collapse of northern cod in local coastal waters, which occurred more than a decade before the moratorium of the early 1990s. Fish harvesters along the Nunatsiavut coast also experienced the collapse of salmon harvests, which led to a moratorium on commercial harvests in the mid-1990s. Significantly for local fishers, the moratorium on salmon halted char harvests in coastal waters where salmon and char were found in the same region: in these zones it was not possible to catch char without catching salmon as bycatch. Char harvesting was therefore restricted in areas where salmon and char shared the same waters. The Nunatsiavut fishery has also experienced changes in the northern shrimp resource, if only indirectly. The apparent movement of the stock further north, combined with deep quota cuts in SFA 6, may be assisting designates in securing vessels from southern Labrador and from Newfoundland that have spare capacity to fish for shrimp. At the same time, our research participants expressed the concern that northern shrimp harvesters in SFA 6 may be beginning to seek

access to and lobby for shrimp quotas in SFA 5 where the resource appears to be stronger and more likely than SFA 6 to remain the source of significant shrimp harvests over the long-term.

The variability of fish resources in Nunatsiavut may account for a heightened sensitivity to resource changes, and a commitment amongst fishery stakeholders to ensuring sustainable harvesting. Below, we first point to two instances, one from the past and one from the contemporary period, of environmental change that illustrate the commitment to sustainable resource use in local fisheries that have been supported by the benefits derived from the shrimp fishery. We then point toward challenges and potential opportunities with the major changes occurring in the northern shrimp stocks.

The first example is associated with Arctic char, a species that is known to inhabit specific coastal regions. In other words, unlike cod, char tend not to migrate long distances. This behaviour places char in a potentially vulnerable situation when harvesting pressure is high. Aggressive harvesting of a local population can lead to very dramatic declines in stock health. This issue was well recognized by local harvesters in the 1980s in the region around Nain. Prior to the removals of people from settlements north of Nain, fishers accessed char right up the Nunatsiavut coast. After the removals of people in the 1950s, many of who moved to Nain, harvesters could only access char populations in the bays around Nain. The Torngat Cooperative recognized this problem, and the issue is one of the key reasons why it decided to use revenues from shrimp to help transport people during the summer to camps north of Nain to fish for char stocks that were much healthier. Moving people back to their home settlements during the summer had an obvious social role, which we have discussed earlier, but this decision was also guided by a concern over fish resource sustainability.

A more recent example of sustainable resource use is the snow crab fishery. The Nunatsiavut Government and the Torngat Cooperative are the only license holders for snow crab in 2J north, and as such the way in which they decide to use the resource will be an important factor in shaping the long term sustainability of the snow crab sector. In this context, their recent decision to leave 15 per cent of the quota in the water over concerns for the strength of the snow crab resource is a remarkable example of forward thinking, which appears to have paid off in the long run:

We've held back 15 percent of our quota there in the last three years now because there was some science that recruitment wasn't doing that great, but this year the snow crab fishery was the best anyone has seen in a lot of years, actually, which is interesting. Although the last science... last fall recruitment still wasn't great, so it remains to be seen how the fishery this year will impact future years, but, you know, we're always quite conservative in our thinking, I guess. Like, we don't want to ruin it for ourselves, right, like, especially with snow crab [Interview 0015].

Our research suggests that there is a strong commitment to resource sustainability amongst fishery stakeholders in Nunatsiavut. The Arctic char and crab cases are two examples where decision making is informed by concerns around resource sustainability. This commitment to resource sustainability was also evident at the Joint Fisheries Workshop we attended in November 2015.

In terms of the northern shrimp fishery, there is wide consensus that fundamental ecological transformations for the species in the Northwest Atlantic are underway. These changes create significant uncertainty around resource access and development. As one interview participant noted:

I guess if you look at it in terms of long-term and how the northern shrimp fishery will play out, it's really, I guess, anybody's guess. If you put a lot of thought into the general climate issue and how that may affect the ocean getting warmer and not being good for shellfish, well, the future doesn't look very bright for the shellfish fishery in general, but, you know, that's kind of like a long-term look at things, and we haven't even considered that at all. [Interview 0019]

There is also concern that if the shrimp fishery changes a distribution pattern common in the 1980s and 1990s, more intense trawling activity can be anticipated in areas adjacent to Labrador (Hawke, Cartwright, and Hopedale Channels and Saglek Bank), which could negatively impact other important species (Coombs 2010: 46).

At the same time, through Northern Shrimp Advisory Committee meetings, DFO and scientists have communicated the expectation of a contraction and a shift back of shrimp to more 'traditional' areas, which might mean a greater share of the resource will be located adjacent to Labrador and Nunatsiavut. This not only reinforces the importance of getting clarification on the interpretation of the lands claim agreement provisions on shrimp allocations for Nunatsiavut, but also provides an opportunity to revisit the idea of developing a shrimp plant in the future. Three reasons for this are apparent. First, allocations for regional interests might increase in the long-term. Second, it is not out of the realm of possibility that market conditions could change to a position that is more favorable to inshore processing sector than to offshore sector. Third, the environmental change underway could result in greater shares of northern shrimp occurring adjacent to Nunatsiavut. Groups in the region have been informally told that the benchmark of volume required to justify investing in a shrimp processing is around 10,000,000 pounds. The current Nunatsiavut quota is about 3,000,000 pound. Interview participants explained that if the 11 per cent of increases since the effective date of the Land Claim were honored, they believe they would be near the benchmark justifying a shrimp processing plant. Security in access to additional resource will be a critical, though not sufficient, condition for revisiting the idea of developing a shrimp plant in the region.

5.3.6 A new policy for northern shrimp allocations?

In addition to anticipating looming environmental transformations, this report was written at a time of dramatic change in northern shrimp allocation policy. The Ministerial Advisory Panel (MAP) on the northern shrimp LIFO policy recommended that this approach to resource allocation and reduction be abolished (MAP 2016). Significantly for Nunatsiavut interests, the MAP recommended that shrimp allocations to cod/crab affected fishers in SFA 5 should be phased out and redistributed to offshore and adjacent Indigenous interests. The justification for this recommendation was that it would provide tangible evidence of DFO's commitment to the development and support of Indigenous fisheries.

The acting Minister of Fisheries and Oceans, Dominic LeBlanc, accepted the general recommendations of the MAP and redistributed a much smaller quota of northern shrimp between offshore and inshore interests in SFA 6. He also re-instituted Special Allocations to Indigenous groups and to community based organizations. Based on the Minister's overall acceptance of the MAP's report, and recent decisions in SFA 6, it seems likely that there will be some redistribution of northern shrimp resources in SFA 5, which will be of direct relevance to Nunatsiavut interests. There is therefore opportunity for securing a greater share of northern shrimp resources for Inuit in Nunatsiavut.

6. Conclusions and Recommendations

The aim of this report was to examine three key issues relating to shrimp allocations in Nunatsiavut. **First**, our goal was to provide a detailed analysis of the policy objectives that informed northern shrimp licenses and Special Allocations in this region. **Second**, we aimed to examine the regional development outcomes of allocations. **Finally**, we hoped to draw out lessons of the Nunatsiavut experience of allocating shrimp quotas to Indigenous groups for policy makers, planners and regional and community-based groups committed to the equitable and sustainable allocation and utilization of fish resources. We consider how the report covered each of these goals in turn before we draw out the broader implications and recommendations that emerge out of this research.

6.1 Summary of findings

Our detailed interviews with research participants, combined with an exhaustive review of secondary and archival sources, allowed us to reconstruct the political, social and economic context for the allocation of northern shrimp licenses and Special Allocations in Nunatsiavut. A key contribution of this report was to highlight the critical changes that were happening in this region during the late 1970s and early 1980s that led to the awarding of the single offshore license to the Torngat Cooperative, and subsequent allocations to other organizations in the 1990s and 2000s. These changes included the growing political power and organizational capacity of Indigenous groups, combined with a commitment to resource development that was controlled by and beneficial to local groups, and especially Inuit in Nunatsiavut. The political organizations that emerged during this period – especially the Labrador Inuit Association – played a critical role in securing the license and in establishing a cooperative that was responsive to the needs of coastal fish dependent communities. These local dynamics intersected with broader national and provincial political concerns to ensure that fish resources located in waters adjacent to Canada and Canadian provinces were used to the benefit of people who lived in coastal regions adjacent to those resources, including Indigenous groups. In this way, the Nunatsiavut case has added significantly to our overall research programme on northern shrimp allocations in that it has highlighted the crucial role that local social and political dynamics played in securing nationally administered resource allocations for the benefit of rural and remote coastal peoples.

The idea that the people of Nunatsiavut could make decisions over their own future through locally controlled resource development was significant. One participant spoke of the wisdom of elders on the board of the Torngat Cooperative in the early days, explaining he remembered one:

who brought the wisdom of the elders and who really took great pride in the fact that they were playing a direct role in managing their own fishery and participating in all the meetings we had where, you know, people who hadn't had the opportunity before were sitting around and getting some training and, like, you know, it was pretty heady, pretty heady days in that way, right? We were all excited. I was excited.” [Interview 0017].

This newfound control over a resource during a period when Indigenous people were far too often ignored or exploited created new paths of locally driven development and change in a partially subsistence society. Our work has traced the diverse and multiple regional development outcomes of northern shrimp allocations. We revealed the ambitious and impressive work of the Torngat Cooperative in the early 1980s to develop fisheries in a geographically challenging context along the Nunatsiavut

coast. These efforts led to large increases in the employment of processing workers, new opportunities for harvesters, the development of fish harvesting and processing opportunities, and it allowed Indigenous groups to access fish during the summer in places that were of great social and spiritual significance. This initial burst of activity was tempered to a certain degree due to the significant costs associated with operating various initiatives along the Nunatsiavut coast, and since the late 1980s the focus of fishery processing efforts has been geographically focused in Nain and Makkovik. The consolidation of development efforts by northern shrimp quota and license holders was also, crucially, due to the failure of provincial and federal policy makers to agree on a development strategy for coastal Labrador's fishery. The Torngat Cooperative's ambitious efforts during the early 1980s to include all of the coastal towns along the Nunatsiavut coast were closely linked to progressive plans to develop a joint provincial-federal organization to promote and develop the Labrador fishery. In this period, the Canadian Fisheries Development Programme proposed the establishment of Northern Fisheries Development Corporation, which would support, coordinate and enhance fishery development along the Labrador coast. As we note in the report, a detailed programme of investment was outlined, but the failure of the province and the federal government to agree on the mandate of this organization, combined with federal budget cuts, led to the abandonment of this project.

The failure to establish a northern fishery development organization was an important missed opportunity in Nunatsiavut. However, it did not prevent local northern shrimp allocation holders from using northern shrimp as a way to individually and collectively support fishery development in Nunatsiavut. We have discussed how shrimp licenses and Special Allocations are instrumental in providing employment opportunities on offshore vessels and in fish processing plants. Shrimp allocations have also supported the Nunatsiavut Government's designate programme that provides opportunities to Inuit to participate directly in inshore sector harvesting. As was the case in the past, shrimp allocations play a direct role in supporting the development, diversification, or re-development of fisheries, notably Arctic char, which have a good potential to support fishery livelihoods in Nunatsiavut. It is also important to recognize the ongoing development of innovative new initiatives to support inshore harvesting and processing in the form of the Fishery Development Fund, which promises to play a key role in the region.

There are, of course, many challenges facing northern shrimp quota holders and beneficiaries in their efforts to develop a viable and vibrant inshore fishery in Nunatsiavut. Some are longstanding and include the relatively short fishing season, adverse weather conditions, the variability of the fish resource and the great distances to markets. Others are more recent and include challenges in securing labour in plants and identifying individuals willing to work as crew on offshore vessels when there are apparently more attractive land based opportunities. At the same time there are many opportunities including:

- 1) the potential for more secure resource access that seems likely to emerge out of a post-LIFO allocation regime and potential clarification of the land claim agreement provisions related to shrimp allocations,
- 2) the potential for establishing a more established inshore fleet of designate beneficiaries, some of whom may become boat owners, and
- 3) finding ways to exploit and market new wild caught fish species that contribute both economically and socially to the lives of Inuit in Nunatsiavut.

There are two additional themes that run through the research, and that also connect this project with our broader programme that has examined the use of northern shrimp allocations for fish dependent coastal communities (Foley, Mather and Neis 2013, 2015). The first has to do with the organizational model of northern shrimp allocation holders. A key theme in our earlier work on northern shrimp was the

importance of having community based and community-oriented organizations, such as cooperatives or other forms of social enterprises, being responsible for distributing the benefits from northern shrimp allocations. We identified how community based and cooperatives made sound business decisions that emphasized local job creation and regional development. In this way, northern shrimp resources contributed directly to the sustainability of coastal communities. As we argued, “investment and production decisions were guided by the long-term priority of community economic stability rather than the short-term goal of profit generation” (Foley, Mather and Neis 2013, 33). Our research in Nunatsiavut confirms the significance of the social enterprise-like ‘organizational model’ for coastal community sustainability, but also brings new insight into this model by highlighting the development activities of Indigenous organizations and Indigenous self-government. An offshore northern shrimp license in this region is held by a cooperative organization that has a long-term commitment to Nunatsiavut’s coastal communities supported by a strong tradition of democracy and inclusive decision making. The allocations held initially by the Labrador Inuit Association, and later by the Nunatsiavut Government, are also distributed in ways that prioritize equity and fairness while at the same time ensuring a sustainable livelihood for those in the fishery. While our earlier research on northern shrimp did not include a territorial government, we would suggest that the Nunatsiavut Government’s use of northern shrimp allocations is consistent with the general social development objectives of community-oriented organizations and cooperatives in other parts of Atlantic Canada.

The second theme is the tension that often exists between the social objectives of fishery development and the prevailing norms of economic viability. We identified this tension in our earlier work where we argued that several community-based organizations that managed northern shrimp allocations supported an approach that balanced business viability with community sustainability. In the Nunatsiavut context this tension was also palpable, particularly in the early attempts by the Torngat Cooperative to develop the inshore fishery during the early 1980s. As we noted in the report, while these efforts had a very significant impact on employment and fishery development, they were constrained by a lack of funds and income and the absence of a northern fishery development organization. It has meant that the Torngat Cooperative has had to focus its fish processing efforts on Nain and Makkovik where there is a better chance of supplying plants, securing labour, and generating income from the fishery to sustain the organization and its membership. The same tension between social objectives and financial security is evident in the designate programme, which has seen several beneficiaries requesting more secure access to northern shrimp licenses so that these can be used to finance a vessel. A long awaited consulting report may recommend a smaller number of better funded and resourced designates rather than the existing policy that supports a relatively greater number of designates and their crew. Our research does not provide solutions as to how this tension may be resolved; it only points to the importance of not abandoning the social objectives that have been so crucial to this history and contemporary reality of the northern shrimp fishery’s contributions to regional development in Nunatsiavut.

6.2 Recommendations

Advance government relations regarding the following areas:

- Secure commitments by the Government of Canada to work with regional stakeholders to clarify and seek agreement on the dispute regarding the interpretation of shrimp allocation policy provisions in the Labrador Inuit Land Claim Agreement.
- Encourage coordination with DFO and other relevant governments and agencies on supporting the realization of the multi-year designate program.
- Encourage federal and provincial support for the Nunatsiavut Government’s Fishery Development Fund.

Develop a northern fisheries development strategy:

- Develop a multi-stakeholder led northern fisheries development strategy for Nunatsiavut.
- Encourage coordination among resource allocation holders and other fishery stakeholders inside and outside the region with the objective to develop a northern fisheries development strategy.
- Secure support from federal and provincial fisheries management authorities and development agencies for a northern fisheries development strategy.
- Encourage innovation in overcoming geographical and transportation challenges, such as taking advantage of potential new transport activities involving the expansion of northern resource development.
- Build on the strengths, rather than the tensions, between collective approaches and organizations, such as the Torngat Cooperative, the Nunatsiavut Group of Companies and government-administered Special Allocations, and individualized approaches such as the inshore fish harvester designate program for beneficiaries.
- Explore opportunities to build on and develop new relationships with cooperatives and social enterprises in southern Labrador, Newfoundland, and northern regions of Canada as a way to share knowledge, experience and to potentially coordinate production, transportation, and marketing.
- Do not reject the option of considering the development of shrimp processing capacity in the region. Future environmental, resource, transportation, and technological conditions might make the option more feasible in the future.

Enhance labour relations, conditions and opportunities:

- Encourage the continued employment of people in the offshore and inshore fishery sectors.
- Encourage the training of local people in multiple skills and occupations for both offshore and inshore sectors.
- Explore opportunities for occupational and livelihood pluralism, whereby seasonal work in the fishery (e.g. inshore fish harvesters and/or fish plant workers) is combined with work in other sectors during the off-season (e.g. mining; construction) or with recognized work in traditional activities (e.g. hunting). The seasonal nature of inshore fisheries work provides opportunities for formal and informal links between traditional livelihood activities and seasonal wage labour that could be explored in more substantive ways, including with Employment Insurance agencies.

Enhance the capacity for future collaboration and research:

- Establish a mechanism to better inform the people of Nunatsiavut of the historical and ongoing impacts of the shrimp fishery in the region and to seek their input on ongoing strategic fisheries development initiatives inside and outside the shrimp fishery.
- Establish an interdisciplinary team of researchers (including both natural scientists and social scientists), regional partners, and government agencies to evaluate the current and projected future changes in shrimp stocks adjacent to Nunatsiavut.

7. References

Allain, M., 2010. Lessons learned from the domestication process of the Canadian Coldwater Shrimp fishery, Report for Greenpeace International.

- Apostle R, McCay B, Mikalsen KH. 2002. *Enclosing the Commons: Individual Transferable Quotas in the Nova Scotia fishery*. St. John's: Institute of Social and Economic Research, Memorial University.
- Aschan, M., H. Powles, C. Bannister, A. Hough and P. Knapman, 2008. Public Certification Report for Canadian Northern Prawn Trawl Fishery Shrimp Fishing Areas 5, 6, 7/Final. Moody Marine Ltd, Derby. http://www.msc.org/track-afishery/certified/north-west-atlantic/Canada-northern-prawn/copy_of_assessment-downloads-1/assessmentdownloads/Final-Public-Certification-Report_SFA-567.pdf (accessed 3 December 2010).
- Auditor General, 2015. Reports of the Auditor General of Canada, Office of the Auditor General, Ottawa.
- Bankes, N. 2003. Implementing the provisions of the Nunavut claim: re-capturing the resource, *Journal of Environmental Law and Practice*, 12, 141-201.
- Barrow, J. et al. (2001), Allocation of Harvesting Rights in Three Atlantic Canada Marine Fisheries, in R. Shotton (ed.), *Case Studies on the Allocation of Transferable Quota Rights in Fisheries* (Rome: FAO Fisheries Technical Paper-T411), pp. 32–57.
- Beale, J., Dale, A., Snook, J. and Whalen, J. 2011. Nunatsiavut Artic Char Workshop 2011, Torngat Wildlife, Plants & Fisheries Secretariat Series, Torngat Wildlife Plants and Fisheries Secretariat, Happy Valley-Goose Bay, Labrador.
- Brantenberg, A. and Brantenberg, T. 1984. Coastal Northern Labrador after 1950, in W.C. Sturtevant (ed), *Handbook of North American Indians*, 5, Smithsonian Institution, Washington D.C., pp. 689-699.
- Campling, L., E. Havice, and P. McCall Howard. 2012. The political economy and ecology of capture fisheries: market dynamics, resource access and relations of exploitation and resistance. *Journal of Agrarian Change* 12(2-3): 177-203.
- Canadian Foundation, 1984. LINS/Donner fisheries co-operative education project: interim report, Canadian Foundation: Labrador Institute of Northern Studies, Goose Bay, Labrador.
- Carothers C, Chambers C. 2012. Fisheries privatization and the remaking of fishery systems. *Environment and Society: Advances in Research*, 3: 39-59.
- Carothers C, Lew, D.K. and Sepez J. 2010. Fishing rights and small communities: Alaska halibut IFQ transfer patterns. *Ocean and Coastal Management*, 53: 518-523.
- Carothers C. 2011. Equity and access to fishing rights: exploring the community quota program in the Gulf of Alaska. *Human Organization*, 70: 213-223.
- Coombs, R. 2010. Northern shrimp policy paper: an analysis of the development and management of the Nunatsiavut *Pandalus borealis* fishery, Report produced for the Torngat Joint Fisheries Board, Torngat Wildlife, Plants and Fisheries Secretariat, Happy Valley-Goose Bay.
- Coombs, R., Coffey, J., Dale, A. and Snook, J. 2010. Snow crab: a review of the development and management of the *Chionoecetes opilio* fishery in Nunatsiavut, Torngat Wildlife, Plants & Fisheries Secretariat Series. 54pp.
- Coombs, R., Dale, A., Snook, J. 2011. A socio-economic analysis of the Nunatsiavut Snow Crab Fishery, Torngat Wildlife, Plants & Fisheries Secretariat Series. 43pp.
- Crean K. 1999. Centralised and community-based fisheries management strategies: case studies from two fisheries dependent archipelagos. *Marine Policy*, 23(3): 243-257.
- De Alessi, M. 2012. The political economy of fishing rights and claims: the Maori experience in New Zealand. *Journal of Agrarian Change* 12(2-3):390-412.
- DFA, 2013. "Annual Report 2012-2013." Department of Fisheries and Aquaculture. Government of Newfoundland and Labrador. St. John's. http://www.fishaq.gov.nl.ca/publications/annual_report_2012_13.pdf
- DFA, 2014. Open Communication and Clear Action to Support the Fishery: All-Part Committee on Federal

- Shrimp Quota Allocations Outlines Next Steps. Department of Fisheries and Aquaculture. Government of Newfoundland and Labrador. St. John's, April 16.
<http://www.releases.gov.nl.ca/releases/2014/fishaq/0416n08.aspx>
- DFO, 2007. Integrated fisheries management plan: northern shrimp, northeast Newfoundland, Labrador coast and Davis Strait, Department of Fisheries and Oceans, Resource Management – Atlantic, Ottawa.
- DFO, 2008. 'Canada's Fisheries Fast Facts 2008'. Statistical Services: Economic Analysis and Statistics Strategic Policy Sector, Fisheries and Oceans Canada. Ottawa, Ontario, <http://www.dfo-mpo.gc.ca/stats/facts-Info-eng.htm> (accessed 15 June 2011).
- DFO, 2009. 'Canada's Fisheries Fast Facts 2009'. Statistical Services: Economic Analysis and Statistics Strategic Policy Sector, Fisheries and Oceans Canada. Ottawa, Ontario, http://www.dfo-mpo.gc.ca/stats/FastFacts_09-eng.pdf (accessed 15 June 2011).
- DFO, 2010. 'Canada's Fisheries Fast Facts 2010'. Statistical Services: Economic Analysis and Statistics Strategic Policy Sector, Fisheries and Oceans Canada. Ottawa, Ontario, <http://www.dfo-mpo.gc.ca/stats/facts-Info-10-eng.htm> (accessed 15 June 2011).
- DFO, 2011. 'Shrimp'. Department of Fisheries and Oceans, <http://www.dfo-mpo.gc.ca/fm/gp/sustainable-durable/fisheries-peches/shrimp-crevette-eng.htm> (accessed 16 June 2011).
- EcoTrust, 2011. Community dimensions of catch share programs: integrating economy, equity, and environment, *EcoTrust & National Panel on the Community Dimensions of Fisheries Catch Share Programs*, 15 March.
- Eythórsson E. 2000. A decade of ITQ-management in Icelandic fisheries: consolidation without consensus. *Marine Policy*, 24: 483-492.
- Feeny, D., F. Berkes, B. McCay, and J. M. Acheson. 1990. The tragedy of the commons: twenty-two years later. *Human Ecology* 18(1): 1-19.
- Foley P, 2013. National government responses to Marine Stewardship Council (MSC) fisheries certification: insights from Atlantic Canada, *New Political Economy*, 18 (2), 284-307.
- Foley, P. and Mather, C., 2016. Making Space for Community Use Rights: Insights From 'Community Economies' in Newfoundland and Labrador. *Society & Natural Resources*, 29(8), 965-980.
- Foley P, Mather C, Neis B. 2013. Fisheries allocation policies and regional development: Successes from the Newfoundland and Labrador shrimp fishery. A report prepared for The Leslie Harris Centre of Regional Policy and Development. St. John's: Memorial University of Newfoundland; 2013. Available from: (<http://www.mun.ca/harriscentre/reports/arf/2011/11-12-ARF-Final-Mather.pdf>) [accessed 14.03.14].
- Foley, P., Mather, C., & Neis, B. 2015. Governing enclosure for coastal communities: Social embeddedness in a Canadian shrimp fishery. *Marine Policy*, 61, 390-400.
- FPEC, 1978. A proposal for the management and development of the fisheries in Northern Labrador, The Fishery Policy Emergency Committee of Northern Labrador, Submission to Walter Carter, Minister of Department of Fisheries, Government of Newfoundland and Labrador, Happy Valley.
- Ginter J.J.C. 1995. The Alaska community development quota fisheries management program. *Ocean and Coastal Management*, 28: 147-163.
- Gordon HS. 1954. The Economic Theory of a Common Property Resource: The Fishery. *Journal of Political Economy*, 62: 124-142.
- Hardin G. 1968. The Tragedy of the Commons. Garrett Hardin. *Science*, New Series, Vol. 162, No. 3859. (December), pp. 1243-1248.
- Hardy, R. 2015. Fisheries workshop presentation, Fisheries Workshop, Torngat Joint Fisheries Board, Goose Bay, Labrador.
- Harris, D.C. and Millerd, P. 2010. Food fish, commercial fish, and fish to support a moderate livelihood: characterizing Aboriginal and Treaty Rights to Canadian fisheries, *Arctic Review on Law and Politics*, 1(1), 82-107.

- Havice, E., and K. Reed. 2012. Fishing for development? Tuna resource access and industrial change in Papua New Guinea. *Journal of Agrarian Change* 12(2-3):413-435.
- Holland DS, Ginter JJC. 2001. Common property institutions in the Alaska groundfish fisheries. *Marine Policy*, 25: 33-42.
- LRAC, 1978. Position paper on the Labrador Shrimp Fishery, Labrador Resources Advisory Council, Goose Bay, Labrador.
- Mansfield, B. 2007. Property, markets, and dispossession: the Western Alaska community development quota as neoliberalism, social justice, both, and neither. *Antipode* 39(3):479-499.
- MAP 2016, Report of the Ministerial Advisory Panel (MAP): External review of the Department of Fisheries and Oceans' Last-In, First-Out policy (LIFO) for the Northern Shrimp Fishery, Department of Fisheries and Oceans, Ottawa.
- Mather, C. 2013. From cod to shellfish and back again? The new resource geography and Newfoundland's fish economy. *Applied Geography* 45 (2013): 402-409.
- McCay, BJ. 2004. ITQs and Community: An essay on environmental governance. *Agricultural and Resource Economics Review*, 33:162-170.
- Neis, B. and Ommer, R., 2014. Moving Forward: Building Economically, Socially and Ecologically Resilient Fisheries and Coastal Communities. A policy paper. Community-University Research for Recovery Alliance. April. http://www.curra.ca/policy_brief.htm
- Neis, B., Ommer, R., and Hall, P., 2014. Moving Forward: Building Economically, Socially and Ecologically Resilient Fisheries and Coastal Communities. A Policy Booklet. April. http://www.curra.ca/policy_brief.htm
- Nordco, 1982. An analysis of the technical and economic options by which the Torngat Cooperative might best utilize its enterprise quota for northern shrimp, Newfoundland Oceans Research and Development Corporation, St John's.
- Nordco, 1983. Summary of development proposals for the coastal fishery in Labrador, Report prepared for Department of Fisheries and Oceans and Department of Regional Economic Expansion, Newfoundland Oceans Research and Development Corporation, St John's.
- Olson J. 2011. Understanding and contextualizing social impacts from the privatization of fisheries: an overview. *Ocean and Coastal Management* 54: 353-363.
- Pálsson G, Helgason A. 1995. Figuring Fish and Measuring Men: The Individual Transferable Quota System in the Icelandic Cod Fishery. *Ocean and Coastal Management*, 28: 117-146.
- Parsons, L. S. 1993. *Management of Marine Fisheries in Canada*, NRC Research Press, Ottawa, Canada.
- Pinkerton E. 2013. Alternatives to ITQs in equity-efficiency-effectiveness trade-offs: how the lay-up system spread effort in the BC halibut fishery. *Marine Policy*, 42: 5-13.
- RCEU, 1985. Interview with Alex Saunders concerning the Torngat Fish Producers' Co-operative, Royal Commission on Employment and Unemployment, Newfoundland and Labrador, St John's.
- Rennie, H.G. 1989. North Labrador and the Torngat Co-op: An Exploration of Checkland's Soft Systems Methodology through its Application to Fisheries Development. MA Thesis. Department of Geography, Memorial University.
- Ribot, J. C., and N. L. Peluso. 2003. A theory of access. *Rural Sociology* 68(2):153-181.
- Robbins, 2012. *Political Ecology: A Critical Introduction*. 2nd Edition. Wiley-Blackwell.
- Sinclair, P., 1983. Fishermen divided: the impact of limited entry licensing in Northwest Newfoundland, *Human Organization*, 42(4), 307-313.
- Sinclair, P., 1989. Fisheries and regional development: contradictions of Canadian policy in the Newfoundland context, in Thomas, J.S., Maril, L., and Durrenburger, E.P., (eds), *Marine Resource Utilization: A conference on social science issues*, Mobile, University of South Alabama.
- Snowadzky, B., 2005. Coming together or going it alone: how resource-dependent communities survive

- in Newfoundland and Labrador,' Ph.D. Dissertation, University of New Hampshire.
- St. Martin K. 2007. The difference that class makes: Neoliberalization and non-capitalism in the fishing industry of New England 2007, *Antipode*, 39: 527-549.
- Thorbourne, J., 2013. Aboriginal business partnerships: "It's good business," Presentation and the Northern Exposure 2013 Labrador Opportunities Convergence and Tradeshow, Nunatsiavut Group of Companies.
- Torngat, 1982a. Annual Review – 1982, Torngat Fish Produce's Co-operative, Happy Valley, Labrador.
- Torngat, 1982b. Submission to the Atlantic Task Force on the Commercial Fishery, Torngat Fish Produce's Co-operative, Happy Valley-Goose Bay, Labrador.
- Webb, J.A., 2014. The rise and fall of Memorial University's Extension Service, 1959-91, *Newfoundland and Labrador Studies*, 29, 1, 1-15.