

“Just because you have a land claim, that doesn’t mean everything’s going to fall in place”: An Inuit social struggle for fishery access and well-being

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ABSTRACT

Commercial fishing supports coastal communities around the world and fishing livelihoods are often interwoven into local societies, including culture, identity, knowledges, and economies, particularly for many Indigenous Peoples globally. Through a case study with co-management board members in Nunatsiavut, Labrador, Canada, we explore how access to commercial fisheries is a determinant of Inuit well-being. Interviews with fisheries co-managers were conducted and analysed deductively and inductively using a conceptual well-being framework to characterize the ways in which commercial fisheries intersect with Inuit well-being. Our results highlight how commercial fisheries in Nunatsiavut have been a longstanding way of life, with multiple familial connections, and are interwoven with the social, economic, and political components of Indigenous culture and identity. Participants described how the fishing livelihood in Nunatsiavut was put at risk due to overfishing by foreign fleets who exploited Inuit waters during the cod fishery’s formative years. Extensive narrative about fisher committees and community organizing highlighted how political participation and self-determination efforts in the 1970 s led to a measure of sustainability through new Northern Shrimp access. Despite periodic success stories, the Inuit commercial fishery remains in a social struggle. The results show how the fishery has continued with multiple injustices and forms of inequity. The combination of events over time, shared through stories, highlight that these small-scale Inuit fisheries were subject to ocean grabbing or ocean dispossession. Based on these results, future research that facilitates an Inuit vision of Nunatsiavut’s fishing sector is critical, and reclamation policies that facilitate new pathways forward for reconciliation to centre Inuit well-being are needed. Furthermore, these results illustrate how Inuit identified well-being indicators could be adopted for immediate baseline monitoring and to measure progress.

1. Introduction

Global fish production from marine resource captures was estimated at approximately 84.4 million tonnes in 2018 [24], p. 3), providing essential nutrition to billions of people around the world, and critical livelihoods throughout the world’s coastal communities. Renewable marine resources have proven continually vulnerable to overfishing, often causing dire social and economic consequences [27,32,41,42]. The trends are troubling from a global perspective: by 2017, 34% of stocks fished were being harvested at unsustainable levels—a substantial

increase from 10% per year in 1974 [24]. There is an urgent need to reconcile sustainability, economic efficiency, and the equitable distribution of benefits from the fishing sector globally [13,14], particularly with increasing pressures from climate change and the resultant shifting of species and opening of the Arctic ocean [2,33]; advances in technology and capacity to fish (Palomares & Pauly, 2019); challenges in the accuracy of reported versus actual catches [23]; and increasing social struggles around the fair distribution of fishing resources and political recognition of small-scale fisheries and their contributions [3].

With the world’s largest coastline, Canada’s commercial fishing

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sector has generated approximately \$3 billion Canadian dollars in Gross Domestic Product (GDP) and provided over 26,000 direct and indirect jobs across Canada annually [22]. The fishing sector in Canada is diverse, with large-scale offshore operations, small-scale commercial fisheries, subsistence fisheries, and recreational fisheries. The magnitude of the Canadian fishing sector has grown over the past five centuries, from a period with the arrival of European migratory fisheries in the late 15th century by Portuguese, Spanish, English, and French fishers who exploited whales and cod and returned to Europe to sell the catch [11], to the current-day, multi-billion dollar industry.

Canada also has a longstanding, growing, and important Indigenous Peoples' fishing sector. Indigenous Peoples' fisheries were active and integral to survival prior to European contact and have persisted throughout the period of growth and expansion of fisheries both before federation and after. To this day, Indigenous Peoples have remained involved in all levels of commercial fisheries, but it has not been without its conflict (McMillan, 2018). When Canada became a country, one of the first acts of legislation was the creation of the Fisheries Act, which ensured Federal management and control of fisheries. The Fisheries Act supported the growth of non-Indigenous fisheries and displaced Indigenous Peoples' fishing practices through state-controlled fisheries management (McMillan & Prosper, 2016). It has been difficult for Indigenous Peoples' to maintain their connection to both subsistence and commercial fisheries because of persistent conflict through litigation, legal challenges, and continued oversight and oppression (McMillan, 2018). Despite the importance of Indigenous Peoples' fisheries in Canada, there is little statistical data available on their economic contributions. Further, centuries of fisheries colonialism and injustice evolving into government policies that limited the access of inshore fisheries, including small scale Indigenous Peoples' fisheries, but favoured the offshore trawler industry (Matthews, 1995), as well as legal conflict between Indigenous fishers and the State has resulted in historical and present day inequities in the fishing sector [30,37], which require reconciliation and reparations [43,44].

There is increasing recognition that in order to understand the true nature and extent of the holistic benefits of small-scale fisheries, additional metrics and well-being approaches need to be utilized [17]. The idea of measuring well-being¹ across diverse sectors has received increasing global attention in recent decades as the limitations of GDP as an indicator of economic performance and social progress have become widely acknowledged [46]. Member countries of the Organisation for Economic Co-operation and Development (OECD), for example, have been monitoring well-being indicators since 2011 (OECD, 2020), and individual OECD countries, including Canada, are tracking their own well-being progress [10]. Within fisheries management in Canada, science and economic indicators remain the dominant considerations of decision makers; further, research specific to fishing and human health has predominately focused on physical health indicators, without taking a broader well-being approach [49]. Measuring well-being outcomes provides important understandings of the broader social, cultural, and well-being impacts of fisheries on individuals, families, and communities [16]. Building from fishery research initiatives around the world, there is increasing focus on incorporating well-being indicators in small-scale fisheries and with coastal fishing communities by creating new social well-being approaches [17], developing method handbooks [18], and developing new frameworks for ecosystem assessment that

¹ While well-being is a broad concept that considers "psychology, neuroscience, anthropology, sociology, public health, economics, and many other disciplines to understand human flourishing and prosperity" (Plough, 2020, pg 26), this paper frames well-being based on Breslow et al.'s definition: human well-being is "a state of being with others and the environment, which arises when human needs are met, when individuals and communities can act meaningfully to pursue their goals, and when individuals and communities enjoy a satisfactory quality of life" (2016, pg. 250).

centre human well-being, community flourishing, justice, and equity [7]. As such, this paper moves beyond the dominant economic and ecosystem resilience models [1] to understand the importance of fisheries from an Inuit well-being perspective. A qualitative case study with fisheries co-management board members in the Inuit region of Nunatsiavut, Labrador, Canada is used to identify and characterize effects of commercial fisheries on Inuit well-being.

2. Theory and methods

2.1. Nunatsiavut

This research was conducted in collaboration with fisheries co-management practitioners with responsibilities in the Nunatsiavut region, along the Northern Labrador coastline in Canada. The Nunatsiavut region encompasses the five coastal communities (North to South) of Nain, Hopedale, Makkovik, Postville, and Rigolet. The region is governed through the Labrador Inuit Land Claim Agreement (signed in 2005), a treaty which included the creation of the Torngat Wildlife, Plants, and Fisheries Secretariat, which is the co-management implementation organization for the region (Snook, Cunsolo, & Morris, 2018). The land claims agreement for Nunatsiavut outlines the roles and responsibilities for fisheries management through the Torngat Joint Fisheries Board, covering jurisdictional boundaries within tidal waters referred to as the Zone [48 690 sq km], and defining adjacent waters as due east of the Zone [318 683 sq km] (Fig. 1).

Nunatsiavut Inuit have an important attachment to their marine environment that predates European contact [8]. Since the onset of colonialism, there has been extensive exposure to external commercial fishing enterprises that exploited and unsustainably fished valuable fish resources in the region for over 300 years [9] and that exploitation severely limited what would have been available to Inuit communities for subsistence and livelihood strategies. This pattern of fisheries exploitation by external interests has persisted for hundreds of years, with fishing interests from European outposts to harvest valuable species such as whale, cod, and salmon in the region.

Presently, the Nunatsiavut region has five commercial fisheries focused on char, scallops, crab, shrimp, turbot, and two fish processing facilities operated by a local fish co-operative in Nain and Makkovik [25]. In addition to these commercial fisheries, Inuit in the region also harvest char, salmon, seals, and cod for subsistence. Currently, there is concern that warming ocean temperatures and high exploitation rates are impacting the two most valuable fisheries – shrimp and crab [19,20]; Mullaney & Baker, 2020). The uncertainty and potential fishery closures are not new to the region; but with the signing of the land claim agreement in 2005, there is a new level of self-determination in the fisheries, and local rightsholders are increasingly able to define and advocate for new objectives in fishery management.

2.2. Knowledge sharing

Given the complexities of socio-ecological research in Indigenous territories [48], and the imperative to prioritize the voices of Inuit [31], this research used in-depth interviews as the primary research tool. Interviewees included co-management board members with the Torngat Joint Fisheries Board (TJFB) and the Torngat Wildlife and Plants Co-management Board (TWPCB). Interview questions were developed in collaboration with members of our research team, including an experienced Inuit researcher from Nunatsiavut to help pre-test the format and approach. The interview guide was comprised of questions focused on participant time and experience on the land; experiences with wildlife and key species in the North; experience with and changes observed from fish management; reflections on successes and challenges in co-management; thoughts on navigating various bureaucracies (Inuit, provincial, territorial, and/or federal) over time; and opportunities and challenges related to mobilizing co-management into practice.

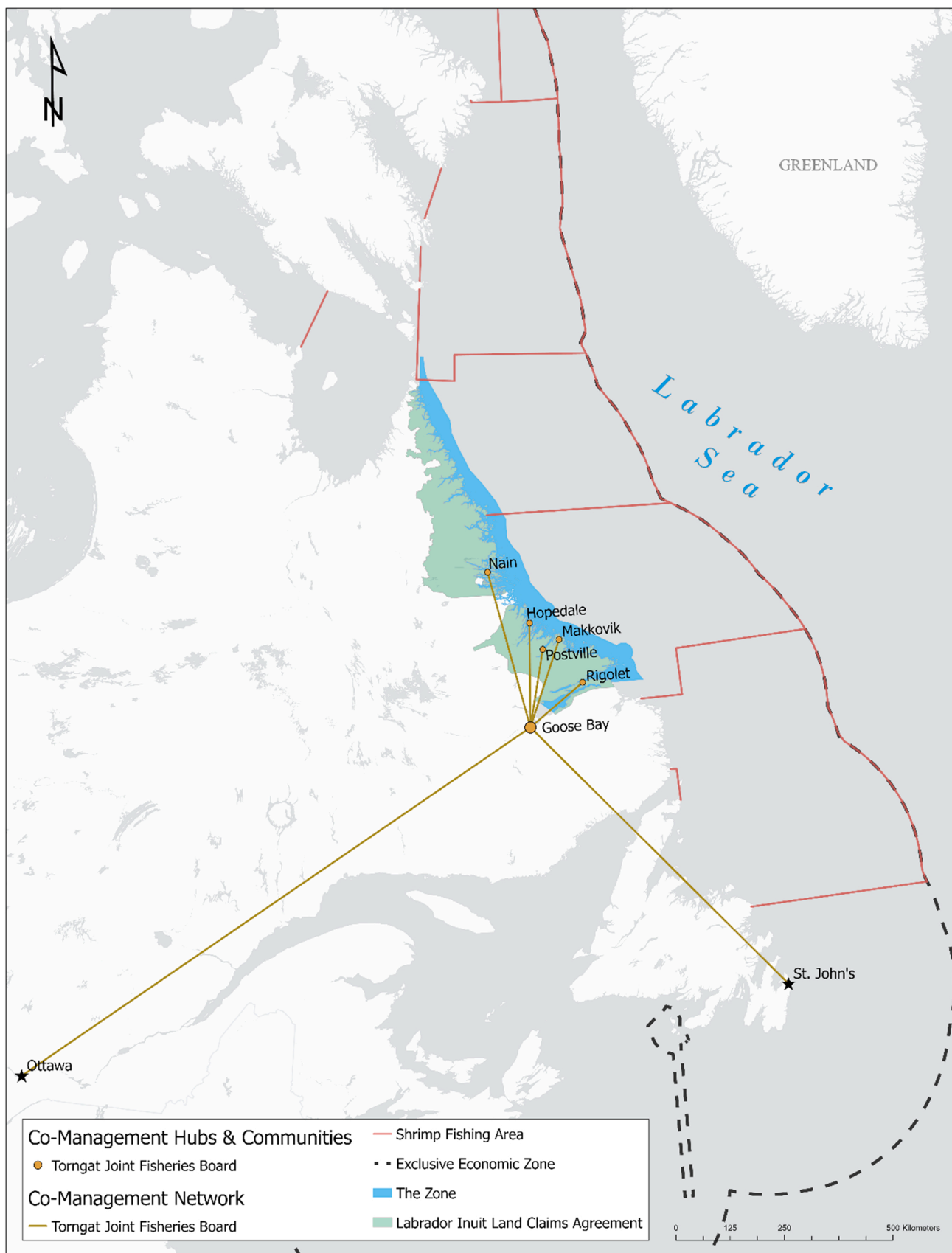


Fig. 1. Map of Nunatsiavut land claim region including the tidal waters (referred to as the Zone), communities, and marine regions. Nain and Hopedale represent the administrative and legislative centers for the Nunatsiavut Government, respectively. St. John's represents the Provincial capital of Newfoundland and Labrador. Both St. John's and Ottawa represent regional and head offices, respectively, for the Department of Fisheries and Oceans. Torngat Fish Producers Co-op fish plants are in Nain and Makkovik.

Eleven interviews ($n = 11$ males; 8 Inuit, 3 non-Inuit) were conducted, producing 19 h and 47 min of recorded data for analysis. Interviews were conducted by the lead researcher (Inuk from Labrador) between December 11, 2018 and April 11, 2019. Most interviews took place in person ($n = 8$), with the remaining interviews conducted via telephone ($n = 3$). All interviews were audio recorded, with informed consent, and conducted in English at the participant's request. At the time of this research, there were no women appointed to the TJFB or the TWPCB; as such, there were no women in the pool of potential interviewees, creating an absence in women's perspectives and lived experiences. There were three non-Inuit interviewees, as the Board is also comprised of appointees from the Federal and Provincial Governments. At the time of these interviews, the Government appointees were exclusively non-Inuit and generally past or previous members of the public service [29].

The audio recordings from the interviews were transcribed and reviewed by the lead researcher for accuracy, and for comparison with the interview experiences and note taking that occurred during the interviews. The research protocol was approved by the University of Guelph Research Ethics Board, and the Nunatsiavut Government Research Advisory Committee. The Torngat Wildlife, Plants and Fisheries Secretariat managed the data for this project, reflecting ITK's National Inuit Research Strategy priority to ensure Inuit access, ownership, and control over data and information [31].

2.3. Data analysis

Using the 4 C well-being framework from Breslow et al. [7], we applied a comprehensive conceptual framework of human well-being to our data to explore the relationship between Inuit fisheries and the intersections with Inuit well-being. The 4 C framework draws from literature in international development, anthropology, geography, and political science, and was influenced by ecosystem-based management, which endeavours to balance the many interrelated dimensions of ecological integrity and human well-being. The 4 C framework is comprised of four constituents of well-being: 1) connections; 2) capabilities; 3) conditions; and 4) cross-cutting domains. Each constituent contained a list of nested domains, followed by a list of nested attributes (See Fig. 1, Appendix 1, Appendix 2). For example, nested within the 'connections' constituent is the 'tangible connections to nature' domain, and nested within 'tangible connections to nature' are attributes such as 'resource access and tenure'.

To analyze our data, we developed a deductive code book (Appendix 1) using the constituents, domains, and attributes in Breslow et al. [7] to facilitate data coding. Throughout the coding process, we allowed opportunities to inductively develop new attributes if necessary, to fit the context and social differences associated with research in Nunatsiavut and reflecting an Inuit context. Throughout the analysis process, the audio interviews were listened to repeatedly for context and nuances to enrich and add further depth to the analysis. Initial annotations of the data were completed to elicit preliminary research insights. After preliminary annotations, extensive deductive coding was conducted. Finally, memo writing was utilized to summarize key reflections for each interview transcript. A qualitative analysis software, QSR International's NVivo™ 12 software (NVivo™), was used to support coding and data sorting, to facilitate data organization, and for retrieval and organization of quotes (Leech & Onwuegbuzie, 2011).

3. Results

3.1. Fishing as a way of life and Inuit identity

Fishing was described as a way of life for many people in Nunatsiavut, with numerous positive impacts on Inuit well-being (Appendix 2). Individuals explained that "it was wonderful", "that's all I wanted to do", "we lived on fish", we "grew up on it [fish]", and that they "just

loved the life". Fishing in Nunatsiavut was also described as a family affair, with references to grandfathers, fathers, brothers, and uncles. For example, "I fished with my grandfather for char in Nain when I was a kid"; "I grew up fishing. I was four years old, my father was a fisherman"; "I went with my uncle for a few years and when I was 17, I took over. I got my own boat, and I took over the premises where my father fished and I had fished there until 1968"; and "I went cod fishing for one summer with a crew but, just to help with my brother. I didn't make any money at it. My brother was part of a crew, so, my share went towards his" (Figs. 2 and 3). As one participant explained, while people loved fishing and being part of the fishery, this way of life had its challenges and was not always a viable livelihood: "as a young child, nine years old, I started fishing with my brothers, and that continued until I guess I was about 13 when it just wasn't viable anymore".

Maintaining this lifestyle connected to fisheries in the Nunatsiavut region required perseverance and resilience, and the interviewees showed that a lack of security and stability in the fisheries at times also had major impacts on Inuit well-being. There were multiple stories about change as Inuit on the North coast of Labrador were constantly forced to switch fisheries, whether due to, for example, the collapse of cod stocks in the 1960s or the closure of the salmon and char fisheries in the region in the 1990s. As fishers and communities adjusted to the closure of multiple fisheries over time, strong emotions were described in the interviews: "heart-breaking", people feeling "destroyed", and sharing that they "miss them [the fish]". One participant explained, "I don't know if people from the outside had a full appreciation for what that [closing a fishery] done to people".

While Inuit throughout Nunatsiavut used mixed livelihood strategies to adapt to all these changes in fisheries stocks and markets, it was evident through these data that these changes all resulted in major implications for Inuit well-being:

People were happy, they were out working, and they were involved in something they wanted to do, and they loved it, you know, and it was their life. It was their way of life and then all of a sudden, the rug was pulled out from under them and they were lost.

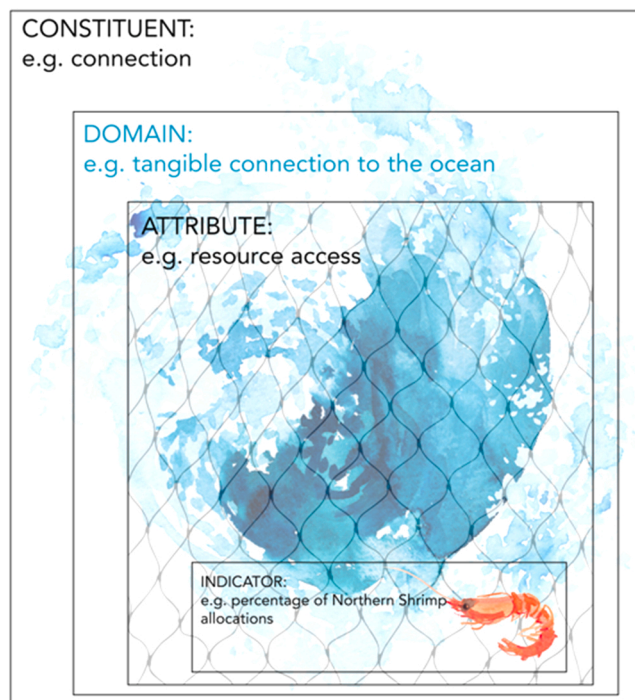


Fig. 2. The nested structure of the 4Cs framework of human well-being. Adapted from Breslow et al. [7] and using a tangible connection to nature domain example, through access to Northern Shrimp.

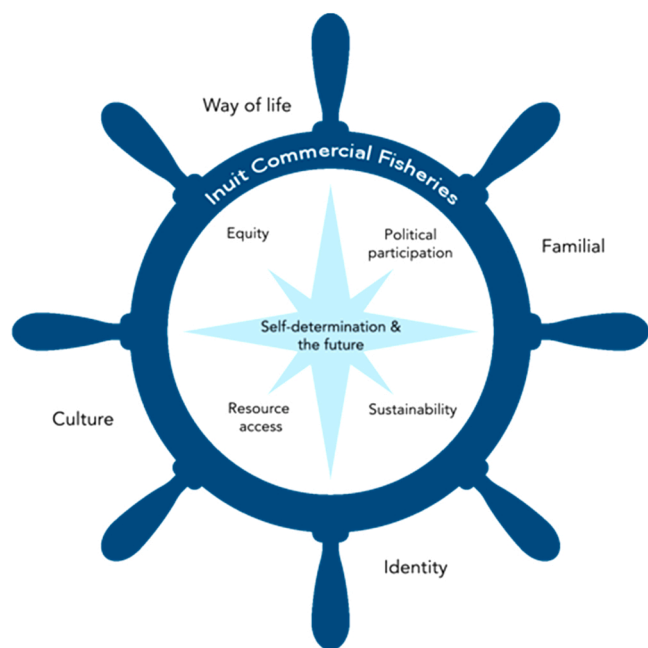


Fig. 3. The all-encompassing outer ring is representative of data in section 1.3.1. The inner ring is representative of data in sections 1.3.2 and 1.3.3. The center is representative of the future direction and data in section 1.3.4. Summary of results for the cultural and identity, tangible access to nature, and freedom of voice domains from the 4Cs framework of human well-being adapted from Breslow et al. [7].

Even though the fisheries remembered and discussed by participants in this research often dated back to the 1950 s, 60 s, 70 s, and 80 s, strong feelings of inequity remained. In particular, the collapse of the cod stocks was a strong example of inequitable support for fishers throughout the Province of Newfoundland and Labrador. When the cod stocks disappeared in Northern Labrador in the 1960 s, the fishers had to adapt and survive with no Government support and, as one participant explained, “by 1968 everybody just went, and that’s when they started to open up the salmon and char fishery”. Further, participants explained that many fishers had to leave the waters entirely and relocate for other work opportunities in other regions.

While many people in this research discussed the pain that came from government-imposed fishery management decisions and the forced closures, one Inuk participant shared the difficulty of having to enforce the government decisions:

The thing that really bothers me to this day was when I had to go to an individual who fished all of their life, I had to hand him a paper and they had to sign a waiver saying that they had – in order for them to receive compensation from the government – they had to sign away every fishing apparatus that they had and never to participate in a commercial fishery again; salmon, trout, or char, and they signed that waiver. I’ve seen many people with tears in their eyes, tears running down their cheeks signing that, and to this day the older people that didn’t really fully understand or appreciate it, that still bothers me. That was very difficult to work through, you know. Then I had to take their gear to the dump and burn it. I took their livelihood to the dump and I burned it because that’s what the government told me to do.

3.2. Political participation leading to a level of sustainability

The time periods discussed in much of the data was prior to the settlement of the Labrador Inuit Land Claim Agreement with the Governments of Canada and Newfoundland and Labrador in 2005; indeed,

Inuit self-government had yet to be negotiated in any Inuit region of Canada. Participants in this research indicated that in the absence of a settled land claim, Inuit in Nunatsiavut were still participating politically and advocating for their inclusion in fishery access opportunities (Fig. 3). For example, Inuit on the North coast of Labrador mobilized politically in the 1970 s onward through the formation of fisher committees when the Federal and Provincial Governments started to introduce fishery regulations and licensing to the region, providing an organized front when Government officials visited the areas. One interviewee had a very lengthy career in the Federal public service, and he shared his experiences with the fisher committee in Nain, in the late 1970 s and early 1980 s related to the char and salmon fisheries:

Fisheries committees were really front and centre and so they should have been because who knew the fishery better than the people who participated in it, and you know I have to give credit where credit is due, and a lot of the things that was done in the fishery would not have been done had it not been for those fisheries committees. They were a powerful force. The committees were very good to work with, I must say, and they were a wonderful help or assistance to us in trying to develop and assist the fishery in Northern Labrador. Things they got involved with, as I mentioned, there was char quotas established in certain bays in Northern Labrador and this was done through the Science Branch of DFO [Department of Fisheries and Oceans], fisheries management and the fishermen’s committees, so local input, local allies was very much taken into consideration when developing any kind of management plans. And the first management plans inshore for Northern Labrador were really char and salmon. And the fishermen’s committees had major input into those for the Northern part of Labrador.

Building from the fisher committees, participants described how other Inuit-led groups began to form and advocate for access to fishing rights, including the Labrador Resources Advisory Council, a Fishery Policy Emergency Committee, the Labrador Inuit Association, and the Labrador Inuit Development Corporation. Today, the Nunatsiavut Government, the Torngat Fish Producers Cooperative, the Nunatsiavut Group of Companies, and the Torngat Joint Fisheries Board all work together to support Inuit fishing rights and access in the region. As another interviewee who also had a lengthy career in Labrador with the Federal public service, explained, “in fact the work that we did in Northern Labrador in all of the locations came as a result of the strong lobbying from these fisheries committees and they were a big factor” and “the Labrador Resources Advisory Council were a powerful lobby group without question”.

These earliest political interactions with Government involved topics such as the introduction of licenses, management plans, enforcement measures, the establishment of the Canadian Saltfish Corporation, and building infrastructure such as wharves and fish plants. The political engagement proved to be beneficial when there were opportunities for new fishing opportunities, especially related to shrimp. As one participant explained:

When the discussions came up regarding the expansion, or development of the shrimp fishery, I guess all of us – we did anyway – thought it was a great opportunity for the fishery in Labrador to get involved. And we had discussions with the Labrador Resources Advisory Council, fishermen’s committees and up the line within DFO.

Participants discussed at length about the shrimp fishery and how it continued to be one of the region’s most successful fisheries. One interviewee explained how the Minister’s office and unions were all involved with the shrimp fishery decisions to be made and a change in policy did occur, as originally “those licenses when they were issued were for other areas of Eastern Canada other than Labrador. But Labrador was what we were concentrating on”. Ultimately, during this time, three offshore shrimp licenses were issued to the Labrador region, and

one of those was for the communities of Northern Labrador. It was issued to the Labrador Inuit Association “to be held in trust for a cooperative to be formed”. Interestingly, it was stated that the Minister of the Department of Fisheries and Oceans issued the license the way he did based on recommendations from the region from the Fishery Policy Emergency Committee and the Labrador Inuit Association. One Inuk interviewee who attended some of these meetings in the 1970 s explained:

A co-op fit right in with the native [Inuit] lifestyle because in a co-op you share, it’s a sharing society and that’s all the native lifestyle really is or was in the past anyway, it was a sharing society; so everybody said, “Yeah we’ll go for the co-op”, and they voted so democratically and chose the co-op.

As a result, the Torngat Fish Producers Co-op formed in 1979 and remains one of the main fishing stakeholders in the region, with an offshore shrimp license, and processing plant operations in Nain and Makkovik. Participants reflected on how the co-operative model has proven to be sustainable for Inuit in the region, and the data highlighted many examples of social initiatives undertaken by the Torngat Co-op, such as special fishery initiatives bringing Inuit who were forcibly relocated from communities back to their former communities for summer fisheries, and contributions to community foodbanks that help with food security.

Participants also discussed how revenue generated by the offshore shrimp fishery has been able to cross-subsidize other fishing opportunities that were not financially viable on their own, but produced employment and other community benefits: “we had cross-subsidized all our operations based on shrimp revenue” and “everything that comes to the Co-op, goes to the fishery on the North Coast of Labrador. Everything.” This Inuk participant elaborated further to say:

The shrimp revenue was something that was constant. It was there that you could rely on. You could use it to go right back into the fishery. Running the plants, giving assistance to the fishers. Using it to borrow to do infrastructure. So, I mean it was as it was intended to do.

3.3. Resource access and inequity

This research revealed multiple examples of injustice in the Nunatsiavut fishery, including the collapse of the cod fishery (Fig. 3). Participants spoke about the over exploitation of cod fish by fishermen from outside of the region, which eventually led to the end of the commercial and subsistence cod fisheries in Northern Labrador. At that time, there were no Government supports for displaced fishermen; however, when the Government of Canada later announced an official cod moratorium in 1992, “the North coast was not included” in the forms of compensation offered to southern based fishing interest. One of the participants working with the Federal government in those times explained: “we fought like hell because what they were saying it was the 2 J, 3 K [regions included] cod. So Southern Labrador was included but not the North”. One interviewee who worked for the Federal government shared:

To be honest with you I couldn’t understand why 2GH [Northern Labrador] wasn’t included. And we at the time made as best representation we could at our level to have it included, but it never did. It was I guess at a very senior level the decision was made on that. But you know, we weren’t in a position to get right to the heart of it perhaps, or I wasn’t anyway.

A second example of a resource access inequity related to legal interpretation of the modern-day treaty, the Labrador Inuit Land Claim Agreement (LILCA). Interviewees shared their frustration that despite ongoing increases to shrimp access, many believed there was still an inequitable amount available to Inuit who are adjacent to the resource and have a land claim agreement. One of the interviewees talked about

the challenges of interpreting and implementation of the LILCA:

The problem is the wording. Licences – you’re supposed to get X amount of fish licences, right? And they [knew] there’d be no new licences, or if they have, they’d be very small. Because everything is now [fish] allocations, so it’s a question of, you know, should the allocations really be considered licences.

A third example of a resource access inequity that participants highlighted in this research related to Inuit snow crab harvesting capacity. After the cod moratorium, a snow crab fishery developed in Newfoundland and Labrador. One interviewee with direct experience in this topic explained:

We continued doing those surveys. When we do a survey, we find a resource, we’d probably issue licences to three or four fishermen who had participated in a lot of cases, in the survey. But, in most cases, we actually chartered a boat. So, we paid for them to do the survey and, we got data.

Eventually, these surveys would make their way to Labrador and crab became a major species that created employment in the communities; but for Northern Labrador, in order to access the fishing resource, fishers needed access to capital and boats. One interviewee explained: “I saw copies of letters, for instance, that came from the Harbour Grace Shrimp Company who wanted to partner with the North coast licences and fish it on one of their vessels”. And continuing, he explained that while the Labrador Inuit Association at the time wanted Inuit to become vessel owners, “we recognized that the economics was not there in the resources available on the North coast for them to become vessel owners” and it was decided joint ventures would be made with Newfoundland boat owners in the south as a trial project. Once this decision was made, multiple trial projects were initiated with varying degrees of success; to this day, most enterprises remain without an Inuit vessel owner. While crab quotas get allocated to Inuit, as one participant explained, “the [financial] beneficiaries of that resource for the most part is the vessel owners” and “the bigger bulk of the money still goes south. We have not addressed that issue”.

3.4. Self-determination and the future

It is clear from this research that there are multiple and sometimes-competing interests in the Nunatsiavut commercial fisheries, often including potentially conflicting ideas of the future of the fisheries in the region, who should govern them, and how (Fig. 3). For example, one interviewee commented, “well the NG [Nunatsiavut Government] should be a government, that’s what they are. Quit trying to be a business operator”. Another interviewee held similar views and stated that the Nunatsiavut Government should be setting objectives, “but not being directly involved because I don’t believe [the Nunatsiavut Government] belongs in private industry”.

There were also multiple ideas shared by interviewees about restructuring the commercial fishery in Nunatsiavut. One participant discussed a past report that recommended a consolidation of fishing assets in the region but the different fishing entities “didn’t always see eye-to-eye”, so that vision of the fishery was not acted upon. One detailed idea that was shared by another participant included:

If you restructure the fishery, you can have a good fishery up there, you could have a half a dozen ninety footers supplying everything you need. They got lots of quota, they got turbot and there’s lots of scallop, they got shrimp, they got crab and cod may come back; but there’s unutilized species, there’s species not even tempted, you know.

Another participant shared different ideas:

Those quotas should be utilized as like nursery quotas or incubator quotas so that you can get people into the fishery and then you

should also be able to expect them to put some money and effort into getting their own. But you should also help that way that you'd get more people into the fishery but utilizing your quotas just to, not just, but as a steppingstone into their own independence.

As the data show multiple ideas about roles, responsibilities, and the appropriate structure for the Nunatsiavut fishery, there were also hopes from a co-management board perspective as well. As one participant shared:

“we do with what we have and we do make good recommendations on some of the fisheries. So, I would like to think that Nunatsiavut and the federal government and to some extent, the province, would look at these recommendations and consider them and give them fair evaluation and utilize where possible”.

4. Discussion

The results from this research highlight that subsistence and commercial fisheries in Nunatsiavut are a longstanding way of life and identity for Inuit, and often a family and intergenerational affair. Fisheries in the region have long been entwined with the social, economic, and political fabric of Inuit communities, with fishing supporting food security and livelihoods for generations in Nunatsiavut, from both subsistence and commercial perspectives. Furthermore, this research clearly revealed connections between fishing and Inuit mental and emotional well-being with negative impacts occurring because of inequitable fisheries management, fishery closures, and a deep connection to fishing grounds and former fishing communities, representing “way of life”, culture, and identity. Yet, due to circumstances outside the control of Inuit and the resulting fisheries collapses, Inuit in Labrador were forced to adapt to the loss of fisheries access, and the resulting lack of financial security and economic, mental, emotional, familial, and cultural hardships. While this experience is not unique to Inuit in Nunatsiavut, little is understood about the impacts of adaptation on people in fishing-reliant communities, and the broader impacts beyond economic loss to identity, wellness, culture, and social connections [15,28].

Fishing, and access to fisheries, can be understood as a determinant of Inuit health and well-being, and may be a protective factor against threats to well-being. For example, Sawatzky et al. [40] highlighted the myriad ways in which land and waters are a determinant of well-being in Nunatsiavut, and how the lands and waters are ‘kin’, ‘healer’, ‘teacher’, and ‘connector’. Further, the authors illustrate how the passing on of traditional knowledge, practising cultural skills, participating in community activities, spending time with family, and supporting each other and sharing in struggles were also connected to well-being in a Nunatsiavut context. This research resonates with other research that links connections to land and Indigenous well-being [47], and also highlights the multiple intersections between and among participating in the fisheries and connecting to water, culture, and identity, and Inuit well-being. This framing of fishing and fisheries access as a determinant well-being, then, further expands the scope of analysis and consideration when fisheries decisions are being made, as it situates fisheries beyond solely economic considerations, to include broader social, cultural, mental, and emotional impacts and outcomes.

Inuit throughout this work also shared that participating in the fisheries was a struggle by many families and multiple community representative organizations over generations. The struggle has been prolonged and spanning over seven decades, and the issues have been very serious in nature due to their direct connection with food security, livelihoods, threats of overfishing by outsiders, and threats to community survival. This resonates with the concept of a ‘social struggle’ [3], p. 47), resulting from the injustices and deprivation experienced by those participating in small-scale fisheries, the negative economic, social, and community effects, and the resulting collective responses. This ‘social struggle’ over fisheries is ongoing in Nunatsiavut, Labrador, where a

sense of unfairness and inequity remains and efforts toward distributional justice are active to support Inuit well-being.

Connected to the concept of a ‘social struggle’, participants in this research identified a collective history of marine access, whether speaking about the loss of access, or the struggle to gain access. There was evidence throughout the interviews of the many ways in which governments and external fishing interests deprived Inuit of access to fisheries, and the related well-being benefits, particularly during the long period of colonization when Inuit self-government was limited, restricted, and marginalized. Participants talked about the cod collapse and highlighted that: the collapse happened during a time when Inuit were not recognized in Newfoundland by the Provincial Government, and well before a land claims existed for Inuit in the region; overfishing by outsiders clearly undermined Inuit security and livelihoods in the region; and the resulting impacts of the cod collapse reduced social-ecological well-being for Inuit. These experiences related to the cod collapse reflect the concept of ‘ocean grabbing’, defined by as the “dispossession or appropriation of use, control or access to ocean space or resources from prior resource users, rights holders, or inhabitants” [4]. Inuit have been historically and systematically marginalized, displaced, and dispossessed of access to marine resources in Nunatsiavut, which not only restricts livelihoods and economic opportunities, but also eliminates a vital well-being opportunity for Inuit in Nunatsiavut.

Further, ocean grabbing or ocean dispossession can be linked to the understanding of land dispossession, which has been shown to have direct and indirect health and well-being impacts on Indigenous Peoples’ throughout Canada and globally [36,47]. Inuit in this research shared powerful experiences about how they, themselves, or their family members, had to leave fishing entirely and, in many cases, relocate from land and waters they were deeply connected to because of fisheries decline, with resulting negative impacts to their well-being. Participants shared stories of how outside fishers knew the damage they were causing to the fish resources in Inuit waters. Some of the outside fishers were also International pointing to the wider consequences of globalization and ongoing colonization. All this activity was happening with the active involvement of the Provincial and Federal Governments through their various agencies and roles in fish management. This pattern of negative behavior from outside pressures resonates with other Indigenous Peoples’ experiences across Canada and globally. For example, in Haida Gwaii, British Columbia, Indigenous Peoples had to deploy strategies for conservation and assert their local management rights to ensure a commercial herring fishery remained closed [35].

The themes of inequity and a sense of unfairness permeated these data [37]. Following the 1992 cod moratorium, government introduced programs to encourage fishers to leave the fishery through a variety of incentives [50]; however, participants in this research discussed the inequity of the government assistance, as Inuit fishers in Northern Labrador were impacted by an earlier cod closure in 1960 s and deemed ineligible to receive compensation or benefits even after the 1992 moratorium. This issue was further compounded when new fisheries such as crab were developed in Newfoundland and Labrador, as fishers who benefited from the moratorium programs and ultimately still stayed in commercial fisheries were able to rebuild livelihoods through crab [50], whereas fishers in Northern Labrador have struggled to build a crab fishery on par with other regions of the province. Indeed, while there are crab in Inuit waters, Inuit harvesters continue to struggle with access and the ability to derive benefits from the resource [39], because a harvesting fleet has not developed, and the majority of benefits continue to flow to southern-based vessel owners.

When policies were implemented that supported communities and cooperative development, there was clear evidence from this research of the resulting benefits—benefits that have kept the fishing industry alive in Nunatsiavut. For example, participants in this research shared the example of northern shrimp access as the time when fishing capabilities started to change in Northern Labrador in the 1970 s, particularly through the leadership of organizations such as the Labrador Inuit

Association and the Torngat Fish Producers Co-Op [26]. This led to a period of increased Inuit self-determination and agency over their fisheries [15], which has created a sustained period of stability for commercial fisheries in Nunatsiavut, albeit still within the context of an ongoing social struggle.

Given the complex social struggle that has involved inequity and challenges to benefit from marine resources in Nunatsiavut Inuit waters, decisions need to be made about the future of these fisheries. Participants shared different ideas and thoughts about how to approach future fisheries development and the Nunatsiavut fishery could benefit from the development of shared objectives and a vision that is determined by Inuit [13]. The Nunatsiavut rightsholders, all levels of government, and researchers have a responsibility to give more attention to this specific social struggle [3]. This further reflects calls for ‘blue justice’ [12], p. 1), an approach to understanding how small scale fisheries and their communities may be impacted by initiatives that focus on ocean development, but do not consider the role of small-scale fisheries in ocean sustainability and ocean justice. Understanding Indigenous Peoples’ fisheries within the context of blue justice enables the Nunatsiavut rightsholders, and Indigenous rightsholders globally, to give added motivation for their social struggle, and to call for governments to make up for past failings and injustices [34], p. 307).

Finally, it is essential to track and monitor the holistic well-being impacts of fishing on Inuit health and well-being; new approaches for developing appropriate and reflective indicators for ongoing monitoring of well-being are required. In Breslow et al, [6], for example, the authors used a robust methodology to develop an approach for evaluating indicators of human well-being within a fisheries context, focusing on resource access and self-determination attributes. After evaluating over 2000 possible indicators, they found that many of the existing indicators and related data do not adequately reflect the ways in which environmental change impacts human well-being, and are further limited in their ability to assess issues of social justice and equity. The authors highlighted a need for new social indicators tailored to specific questions and involving those whose well-being is most directly affected. Our data analysis provided case study data for all 38 attributes and the 4 cross-cutting themes of the 4 C framework [see Appendix 2] showing extensive intersections between commercial fisheries and Inuit well-being. The 4 C framework proved to be very effective for the analysis of data in the Nunatsiavut context. While we focused our results on select themes from the framework, there are multiple other attributes that future research may prioritize. Future use of the 4 C framework could allow policy makers to determine where their knowledge is deepest, where there are clear gaps in available data, where there may be opportunities for special policy initiatives, and discovery of persuasive policy recommendations that may influence a Minister of Fisheries and Oceans to support specific directions in the future. Therefore, we recommend that a set of locally-identified well-being indicators be adopted for monitoring the wide-ranging impacts of the fisheries in Nunatsiavut. This presents an opportunity for local stakeholders to determine their future by selecting the attributes and indicators they may want to track over time based on their understandings of Inuit well-being and working to co-produce this data moving forward through co-management led research [45].

5. Conclusion

While Inuit self-determination in fisheries is often a significant, unjust, and inequitable social struggle, there have been major advancements in Nunatsiavut over the last 50 years from local organizing to co-operative society development to self-government and finally to the introduction of co-management structures in 2005. Currently, there are troubling ecological signs in the region’s two most valuable fisheries (shrimp and crab) [38]; therefore, the time is right for research that considers Inuit futures in commercial fisheries and for research and initiatives that center an Inuit vision for the fishery, to support Inuit

self-determination and thriving, flourishing, healthy communities, with equitable access to marine resources [5]; Snook, 2019). This is particularly relevant and essential at this time, given the Government of Canada now has a fisheries reconciliation strategy [21], and are developing a new Blue Economy Strategy [22]. This is an important opportunity for the Government to engage with communities differently, include diverse indicators of well-being—social, cultural, mental, and emotional impacts—rectify past harms and inequities, and focus on a future of reconciliation and blue justice for small-scale Indigenous Peoples’ fisheries.

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Declaration of Competing Interest

The corresponding author is employed by the Torngat Wildlife Plants and Fisheries Secretariat and completed this research as part of a PhD program at the University of Guelph.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.marpol.2022.105071](https://doi.org/10.1016/j.marpol.2022.105071).

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