# Pathways to Implement the Small-Scale Fisheries Guidelines in Newfoundland and Labrador, Canada

By

Lillian Saul

A thesis submitted to the

School of Graduate Studies

in partial fulfillment of the requirements for the degree of

Master of Arts

## **Department of Geography**

Memorial University of Newfoundland

August 2022

St. John's, Newfoundland and Labrador, CA

#### Abstract

This thesis examines pathways found in barriers and opportunities to implement the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in Newfoundland and Labrador, Canada. The 34<sup>th</sup> Committee on Fisheries in 2020 declared Canada as the fifth country to become Friends of the Small-Scale Fisheries Guidelines. At about the same time, the Canadian government began to develop the Blue Economy strategy, wrapping up its consultation phase in 2022. Yet, it is unclear how the Small-Scale Fisheries Guidelines can be implemented in the Canadian context, or how they will factor into plans for a Blue Economy strategy. Through use of interactive governance theory and written from the perspective of an active commercial fishing person, this research explores challenges and opportunities to implement the Small-Scale Fisheries Guidelines into Canadian fisheries governance, using Newfoundland and Labrador as a case study. Implementation of the Small-Scale Fisheries Guidelines is vital for advancement towards Blue Justice in Canada. Blue Justice, coined by Moenieba Isaacs at the 3rd World Small-Scale Fisheries Congress in 2018 held in Thailand is a concept centering on social justice to carve out just and secure coastal spaces for small-scale fisheries people (Jentoft et al. 2022). Blue Justice means securing access to resources and protections for small-scale fisheries people and being inclusive of small-scale fisheries people in decision-making surrounding development of the world's oceans (Jentoft et al. 2022). This thesis addresses the governance problem of implementation of the Small-Scale Fisheries Guidelines from both the legal and fisher perspectives, with an investigation of laws and policies, as well as operations and practices. Together, these perspectives show the potential for the Small-Scale Fisheries Guidelines to guide and shape future policy, planning and decision-making in Canadian small-scale fisheries, including in a forthcoming Blue Economy strategy. This research finds that there are key

ii

opportunities and pathways for advancing alignment, including strengthening legal recognition and representation of small-scale fisheries people, securing access and tenure rights for smallscale fisheries in the ocean space, and integrating social and community principles in decisionmaking for small-scale fisheries.

#### Acknowledgements

I could not have anticipated, through both struggle and joy, how much freedom, empowerment and learning this thesis journey would offer. I owe all this to the careful, honest and everencouraging mentorship of my supervisor Dr. Ratana Chuenpagdee. She has shaped and guided not only my academic development, but also my character, which has grown under her watch, since coming to St. John's. Also Dr. Evan Andrews, with detailed and analytical feedback, has, from start to finish, engaged with this project in such a way that has not only helped develop and advance the ideas in the thesis, but also deepened my learning, writing and thinking skills. Thank you to Dr. Roger White, who has helped this thesis through his knowledgeable and nuanced feedback, chapter by chapter. I also very much enjoyed conversing with him about things other than this thesis, though these times were brief and few! May he continue to live with joy and light-heartedness, as well as the wisdom which he carries from within.

Thank you to my colleagues from the International Coastal Network. Meeting and befriending them has been perhaps the highest blessing coming from the writing of this thesis. Al Amin Ahmed Ruyel offered encouragement during the challenges, answering even the littlest of questions. Nova Almine offered an open heart and her full support as we journeyed each step of our theses together, overcoming obstacles which without each other might have been insurmountable. Without each of your support and friendship, I feel doubtful I would have finished this degree. I would like to thank the Department of Geography, including all the professors and graduate students who, through the challenges of remote learning and Covid, provided a strong community and academic home for me.

This research would not have been possible without the funding provided by the Ocean Frontier Institute Canada First Research Excellence Fund. Thank you to Angela Drake, who helped navigate travel and conference expenses through her many years of expertise, as well as her personal knowledge having grown up in one of the case study areas for this research. I feel such gratitude for the unique opportunity to research small-scale fisheries in Newfoundland and Labrador.

Without the fishing people and communities who supported me as a research student, who took me fishing and fed me fish, this project would not have been possible, as they shared their invaluable expertise and wisdom, and whose generosity, toughness and spirit inspired me to realize Newfoundland as my new home.

Finally, I would like to thank my friends and family, my parents Amy and Phil, who supported me through this work, my brother Davis, who offers friendship and siblinghood, always, and my own fishing communities in Maine and Alaska, who cheered me on and believed in me, even when I was struggling to find the courage to believe in myself. Though I am the author, this thesis was created within a web of so many individuals, including all the small-scale fisheries researchers who came before me. Thank you to them, for their tireless efforts to make the ocean a more just space for small-scale fisheries communities!

v

## **Table of Contents**

Abstract	ii
Acknowledgements	iv
Tables of Contents	vi
List of Tables	х
List of Figures	xi
List of Abbreviations	xii
Co-authorship Statement	xiii
Chapter 1: Introduction	1
1.1 Background	1
1.2 Context	. 9
1.2.1 Owner-Operator Principle	11
1.2.2 Professional Fish Harvester's Act (1996)	13
1.2.3 Fishing Industry Rationalization	14
1.2.4 The Blue Economy	16
1.3 Study Components	18
1.3.1 Study One: Legal Perspective	19
1.3.2 Study Two: Fisher Perspectives	19
1.4 Research Questions	20
1.5 Thesis Structure	23
Chapter 2: Literature Review and Theoretical Framework	24
2.1 Small-Scale Fisheries in the Global North	24
2.1.1 Gender Equity and Equality 27	
2.1.2 Recognition and Adaptation 28	
2.2 Justice and "Uneconomic" Growth	29
2.2.1 Key Gaps 33	
2.3 Interactive Governance: The Three Orders and How They Apply in NL	34
2.3.1 Third Order Principles	
2.3.2 Second Order Law and Policy	38

2.3.3 First Order Events and Outcomes	40
2.4 Summarizing Gaps and Prospects	41
Chapter 3: Increasing Legal Alignment with the Principles of Just and Sustainable Small-	,
Scale Fisheries in Newfoundland and Labrador, Canada	43
3.1 Introduction	44
3.2 Study Setting	47
3.3 Methods	50
3.4 Key Findings	53
3.4.1 Coverage of the Principles	53
3.4.2 Coverage of the Legal Categories	56
3.4.2.1 Legal definition	56
3.4.2.2 Tenure and labor issues	57
3.4.2.3 Participation in fisheries management and conservation	58
3.4.2.4 Partial, exclusive zones and/or preferential access	59
3.4.2.5 Public financial mechanisms	60
3.4.2.6 Gender laws and policies	60
3.4.2.7 Climate change mechanisms	61
3.4.2.8 Fisher representation in institutional arrangements	62
3.5 Discussion	63
3.5.1 Legal Recognition	64
3.5.2 Recognition along the Value Chain	65
3.5.3 Tenure and Preferential/ Exclusive Zones	66
3.5.4 Fisher Representation and Participation	68
3.5.5 Role of Women	69
3.5.6 Climate Change Mitigation and Adaptation	69
3.6 Towards Blue Justice	70
Chapter 4: Fishers' Perspectives on the Small-Scale Fisheries Guidelines in	
Newfoundland and Labrador	72
4.1 Study Site and Method	73
4.1.1 Participant Recruitment	75
4.1.2 Research Instrument	5

4.2 Key Quantitative Findings (Correlation and Ranking)	. 80
4.3 Qualitative Findings According to the 13 Principles	84
4.3.1 Consultation and Participation (Priority 1)	85
4.3.2 Transparency (Priority 1)	87
4.3.3 Equity and Equality (Priority 3)	88
4.3.4 Human Rights and Dignity (Priority 4)	90
4.3.5 Non-discrimination (Priority 4)	. 91
4.3.6 Holistic and Integrated Approaches (Priority 5)	92
4.3.7 Economic, Social and Environmental Sustainability (Priority 7)	93
4.3.8 Respect of Cultures (Priority 8)	. 94
4.3.9 Social and Economic Viability (Priority 8)	95
4.3.10 Accountability (Priority 10)	97
4.3.11 Rule of Law (Priority 11)	. 98
4.3.12 Social Responsibility (Priority 12)	. 99
4.3.13 Gender Equity and Equality (Priority 13)	.100
4.4 Identifying Pathways to Blue Justice based on Fisher Perspectives	101
4.4.1 Blue Justice and Equitable Sharing of Resources	104
4.4.2 Implementing Bottom-up Governance	107
4.4.3 Integration of Fisher Knowledge	110
4.5 Interactive Governance and Enacting Blue Justice	112
Chapter 5: Lessons from Legal and Fisher Perspectives	113
5.1 Legal Issues Revealed by the Two Studies	113
5.1.1 Tenure/ Secure Access to Licenses	114
5.1.2 Legal Recognition	115
5.1.3 Representation in Institutional Arrangements	116
5.2 Alignment between the First and Second Orders	117
5.2.1 Quadrant 1 (High coverage, high priority)	118
5.2.3 Quadrant 2 (High coverage, low priority)	120
5.2.3 Quadrant 3 (Low coverage, low priority)	121
5.2.4 Quadrant 4 (Low coverage, high priority)	121
5.3 Opportunities for Blue Justice in NL	122

5.3.1 Small-Scale Fisheries in the Global North	122
5.3.1.1 Tenure and gender equity and equality	123
5.3.1.2 Shifting the aim from rationalization to recruitment	124
5.3.2.3 Small-scale fisheries representation	125
5.3.2.4 Distinct legal recognition	126
5.3.2 Blue Justice and "Uneconomic" Growth	127
5.3.2.1 Blue Justice for coastal communities	128
5.3.2.2 Transdisciplinary governance	129
5.3.3 Interactive Governance for Blue Justice	130
5.4 Blue Justice for Small-Scale Fisheries and Beyond	131
Chapter 6: Conclusion	. 132
6.1 Study Limitations	124
6.2 Future Research	135
6.3 Final Reflections: Blue Justice for Small-Scale Fisheries!	136
References	139
Appendix I Sample Research Questionnaire	161
Appendix II What do the SSF Guidelines mean According to Small-Scale Fishers in	
NL?	164
Appendix III Documents Reviewed	167

# List of Tables

Chapter 1
Table 1: Thirteen Principles in the SSF Guidelines with abridged definitions using words from
the original document 2
Chapter 3
Table 1: Types and number of documents
reviewed
Table 2: Explanation of presence and absence considerations regarding alignment between
principles and laws
Table 3: Coverage of the SSF Guidelines by Federal laws relevant to NL fishers 53
Table 4: Participation of small-scale fishers in management and conservation
Table 5: Representation of small-scale fishing people in institutional arrangements 63
Table 6: Quotas distribution in NL Crab Management Area 3LNO (2018), based on Integrated
Fisheries Management Plan, Snow Crab, NL Region (crab management areas shown in map in
Appendix 6)
Chapter 4
Table 1: Number of participants based on vessel length/fleet and region
Table 2: Normalized scores for each principle and group according to vessel length fleet
(Ranking shown in parentheses)
Table 3: Normalized scores for each principle and group according to region (Ranking shown in
parentheses)
Table 4: Normalized scores for each principle and group according to vessel fleet and region
(Ranking shown in parentheses)
Appendix I
Table 1: Participant placement and justification for principles   161
Table 2: Sorting Cards definition used on the cards, adapted from the SSF Guidelines
definition
Appendix III
Table 1 Number and types of documents reviewed

# List of Figures

Chapter 1	
Figure 1: Tracing the owner-operator principle in Atlantic Canadian fisheries policy and law	12
Figure 2: Mapping of principles based on Study 1 (coverage) and Study 2 (priority), response	
from all fishers (38), including small boat (<40 ft) and inshore (40-65 ft)	22
Chapter 2	
Figure 1: The three orders of interactions for interactive governance theory	36
Chapter 3	
Figure 1: Map of Newfoundland and Labrador	48
Chapter 4	
Figure 1: Map of the case study region	. 74
Figure 2: Example Sorting Board. Participant 19, inshore fisher from the Burin Peninsula	.78
Figure 3: Describes distribution of answers according to each	
principle	84
Chapter 5	
Figure 1: Mapping of principles based on Study 1 (coverage) and Study 2 (priority), response	
from all fishers (38), including small boat (<40 ft) and inshore (40-65 ft) 1	118

## List of Abbreviations

ASP	Association of Seafood Producers
CETA	Canada-European Union Comprehensive Economic and Trade
Agreement	
COFI	Committee on Fisheries
DAL	Department of Agriculture and Land, Prince Edward Island
DFC	Department of Fisheries and communities, Prince Edward Island
DFO	Department of Fisheries and Oceans, Canada
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization
FFA	Department of Fisheries, Forestry and Agriculture, NL
FFAW-Unifor	Fish, Food and Allied Workers Union
GBA+	Gender Based Analysis Plus
NAFO	Northwest Atlantic Fisheries Organization
NL	Newfoundland and Labrador
PFHCB	Professional Fish Harvesters Certification Board
SSF Guidelines	Small-Scale Fisheries Guidelines

## **Co-Authorship Statement**

For this manuscript, I, the student, prepared the research proposal and was responsible for the research process including data collection and analysis, and the bulk of the manuscript writing. This thesis includes one manuscript, Chapter Three, written in collaboration with the thesis supervisor, Dr. Ratana Chuenpagdee and committee member, Dr. Evan Andrews. All committee members, including Dr. Chuenpagdee, Dr. Roger White, and Dr. Andrews provided significant feedback at all stages of the research, as well as editorial suggestions during the writing and revision of the thesis.

### **Chapter 1: Introduction**

#### **1.1 Background**

The purpose of this research is to identify some pathways, based in challenges and opportunities, for implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (SSF Guidelines) in Newfoundland and Labrador (NL), Canada. Identifying these pathways is vital for ensuring small-scale fisheries have protections and secure access to space and resources in the future. The SSF Guidelines are governing tools for guiding, through principles and objectives, protections of rights for small-scale fisheries sectors worldwide. One of the major justifications for implementing the SSF Guidelines is Blue Justice, a concept which relates issues for small-scale fisheries people to an imperative of social justice in the world's oceans. Blue Justice, coined by Moenieba Isaacs at the 3<sup>rd</sup> World Small-Scale Fisheries Congress in 2018 held in Thailand (Jentoft et al. 2022), means securing access to resources and protections for smallscale fisheries people and being inclusive of small-scale fisheries people in decision-making surrounding ocean development (Jentoft et al. 2022). Enacting the SSF Guidelines into laws and policies for Blue Justice takes relentless effort by researchers, governments, and nongovernmental organizations for identifying actions which move towards just and sustainable small-scale fisheries. Implementation of the SSF Guidelines is thus a governance problem, which can be approached from two perspectives—document review of laws and policies and empirical research with fishing people. Three research questions guide the overall analysis. First, to what extent do laws and policies applying to NL small-scale fisheries align with principles in the SSF Guidelines? This document review, showing the legal and policy perspective, illuminates gaps in

legal protections for small-scale fisheries people, which may be creating barriers for advancement of Blue Justice. Second, according to fishers, which SSF Guidelines principles require the most action and attention for implementation in NL? This empirical research, which explores fisher perspectives, helps identify gaps and strengths in how principles are practiced and operationalized. Fisher perspectives reveal barriers and opportunities which a document review cannot show, as well as priorities, which is important considering that not all principles can be implemented equally at the same time. And third, what are some key pathways, based in barriers and opportunities, associated with implementation of the SSF Guidelines to achieve Blue Justice in NL? Identifying some actions and strategies from the legal and fisher perspectives is vital for moving towards incorporation of key principles, as shown by Table 1, into decision- and policymaking for small-scale fisheries protections and support.

Table 1: Thirteen Principles in the SSF Guidelines with abridged definitions using words from the original document

Principle	Abridged Definition
	Recognizing the inherent dignity and the equal
	and inalienable human rights of all individuals.
	Respect human rights principles and their
	applicability to communities dependent on
Principle 1: Human rights and dignity	small-scale fisheries.
	Recognizing existing forms of organization,
	traditional and local knowledge and practices
	of small-scale fishing communities, including
	indigenous peoples and ethnic minorities.
Principle 2: Respect of cultures	Encouraging women leadership.
	Promoting in the small-scale fisheries the
	elimination of all kinds of discrimination in
Principle 3: Non-discrimination	policies and in practice.
	Fundamental to any development. Recognizing
Principle 4: Gender equity and equality	the vital role of women in small-scale

	fisheries. Equal rights and opportunities should
	be promoted.
	Promoting justice and fair treatment – both
	legally and in practice – of all people and
	peoples. Differences between women and men
	should be acknowledged and specific measures
Principle 5: Equity and equality	taken to accelerate de facto equality.
	Ensuring active, free, effective, meaningful
	and informed participation of small-scale
	fishing communities, including indigenous
	peoples, and taking existing power imbalances
	between different parties into consideration.
	This should include feedback and support from
	those who could be affected by decisions prior
	to these being taken and responding to their
Principle 6: Consultation and participation	contributions.
	Adopting a rules-based approach for small-
	scale fisheries through laws that are widely
	publicized in applicable languages, equally
	enforced and independently adjudicated, and
Principle 7: Rule of law	that are consistent with existing obligations.
Thepte 7. Rule of law	Clearly defining and widely publicizing
	policies, laws and procedures in applicable
	languages, and widely publicizing decisions in
Dringin 1. 8. Transmonter	applicable languages and in formats accessible to all.
Principle 8: Transparency	
	Holding individuals, public agencies and non-
	state actors responsible for their actions and
	decisions according to the principles of the rule
Principle 9: Accountability	of law.
	Applying the precautionary approach and risk
	management to guard against undesirable
	outcomes, including overexploitation of
Principle 10: Economic, social and	fishery resources and negative environmental,
environmental sustainability	social and economic impacts.
	Recognizing the ecosystem approach to
	fisheries (EAF) as an important guiding
	principle, embracing the notions of
	comprehensiveness and sustainability of all
	parts of ecosystems as well as the livelihoods of
Principle 11: Holistic and integrated	small-scale fishing communities, and ensuring
approaches	cross-sectoral coordination.
	Promoting community solidarity and collective
	and corporate responsibility. Fostering an
	environment that promotes collaboration
Principle 12: Social responsibility	among stakeholders should be encouraged.
	uniong sumenoration should be encoulaged.

	Ensuring that policies, strategies, plans and actions for improving small-scale fisheries
	governance and development are socially and
	economically sound and rational. They should
	be informed by existing conditions,
	implementable and adaptable to changing
	circumstances, and should support community
Principle 13: Social and economic viability	resilience.

My perspective in this research is informed by the fact that I am a fisher currently employed in the small-scale fisheries sector. My research journey began in my own work for the last seven years as a commercial fishing deckhand on small boats in Maine and Alaska, and most recently in NL. Through these experiences, I gained firsthand knowledge of the small-scale fisheries context in the Global North. Often fisheries sustainability is thought of in terms of the health of the fish stocks. However, as a fishing person, I see that governance is vital to sustainability in fisheries. "Governance" refers to all the arrangements, institutions, processes, and outcomes which interact to formulate decision-making in fisheries to help fish stocks and fisheries communities become resilient, adaptable, and cared for (Chuenpagdee 2011a). Attention towards governance is necessary because of Blue Justice, which is a concept centering on social justice to carve out just and secure coastal spaces for small-scale fisheries people (Jentoft et al. 2022). The concept of Blue Justice, explored throughout this thesis, was also enlightening for me, putting into words the many stories and struggles I had experienced in my own fishing communities. As such, I explore how governance arrangements can better support sustainability and Blue Justice in small-scale fisheries, to improve livelihoods, and protect small-scale fisheries rights, not just in NL, but for small-scale fisheries in Maine, Alaska and across the Global North.

Small-scale fisheries are complex and unpredictable—containing what Kooiman et al. (2005) refer to as diversity, complexity, and scale. Jentoft and Chuenpagdee (2009) refer to small-scale fisheries as a "wicked problem," which is a problem that can never be solved because it is complex, constantly changing, unpredictable and at times contradictory. Because of the many components and voices at play in these contexts, small-scale fisheries governance challenges may become overwhelmingly complex for any student or researcher. Thus, I use two approaches which embrace, rather than ignore, the complexity evident in small-scale fisheries in NL and at home. These two approaches are suitable for addressing problems in small-scale fisheries and appealing to me based on my observations fishing and researching. These approaches are interactive governance theory and transdisciplinarity.

First, interactive governance theory is a critical lens with which to identify governance challenges and opportunities associated with implementation of the SSF Guidelines (Jentoft and Chuenpagdee 2009; Barragán-Paladines et al. 2017). Interactive governance theory can be applied to small-scale fisheries to describe relationships and exchanges between actors, groups and institutions that influence the conditions, dynamics, and sustainability of small-scale fisheries (Chuenpagdee 2011a; Kooiman et al. 2005). I use the notion of the three governance orders, which are critical components of understanding how to group, relate and analyze interactions in small-scale fisheries (Kooiman 2003). In the first order are the everyday decision-making, actions, and outcomes, for example fish price fluctuations or quota allocations in a given year. In the second order are institutions, in this case the laws and policies, but also systems of agreements, norms, procedures and organizations (Kooiman et al. 2005). And in the third order are values, images and principles guiding and underlying the entire governing system (Kooiman

5

and Jentoft 2009). Particularly relevant for this research is the notion of principles, which serve as the guideposts of governance, dictating and binding decision-making (Song and Chuenpagdee 2015). Principles are a good place to start in identifying gaps and alignment between the governing system and the SSF Guidelines. Principles are concretely written in the SSF Guidelines and often written explicitly in legal texts, while values and images may be more obscure. My research connects principles in the SSF Guidelines to the notion of principles in the third order of interactive governance theory to investigate how, through interactions between the three orders, the SSF Guidelines can be implemented in NL for advancement of Blue Justice.

Second, transdisciplinary research incorporates perspectives of different academic disciplines, as well as perspectives outside of academia, including government, fishers, and the public, with recognition that neither scientists nor government officials are the absolute authority on a given topic (Chuenpagdee and Jentoft 2019; Barragán-Paladines et al. 2017). Transdisciplinarity is a theoretical framework and research approach which centers on inclusive and participatory research through acknowledgment that diverse perspectives are needed for addressing social problems, such as those in fisheries. The transdisciplinary approach aligns well with interactive governance theory because of its focus on bottom-up and participatory decision-making, highlighting the importance of different "ways of knowing," which according to Johnson et al. (2019: 36) means "different approaches to knowledge and ways of being in the world." Ways of knowing are influenced by personal background, academic field, and methodology, and encompass local, experiential, practical, and indigenous knowledge. Of equal importance in transdisciplinary approaches is the disagreement which often arises when diverse perspectives come together. Johnson et al. (2019: 36) suggest that previous attempts to "translate" across

sectors and disciplines have failed due to distrust and conflict. Thus, these authors explore what can be done to implement a 'values-sensitive approach' in transdisciplinary work, "premised on the idea that different ways of knowing coexist" and that no one way is better than another (Johnson et al. 2019: 36). Recognizing disagreement through this lens—that no single perspective is the 'right' perspective—and accepting adversity is vital to move past conflicting values and perspectives towards meaningful change.

My own perspective is transdisciplinary because I am an active commercial fishing person and small-scale fisheries researcher. In this way, I bring unique knowledge and awareness to this research field and am connected to sustainability for small-scale fisheries in more ways than one. I claim a space of both credibility and optimism because I have direct experience in the fishing industry and hope for a bright future as a fishing person, and researcher. In using the transdisciplinary lens, I do not shy away from subjectivity, which makes this research more than scientific—it is also potent and meaningful for myself and my fishing and academic communities.

I have told you a little about my own experience in the small-scale fisheries, but not yet what "small-scale" means in NL. In the context of this research, "small-scale" refers to the small boat fishing sector, which includes vessels <40 feet in length. These are part of the inshore sector, which are vessels <65 feet in length (Department of Fisheries, Forestry and Agriculture [FFA] 2020, DFO 2019a). Small boat and inshore fisheries in NL, as in Maine and Alaska, are central to fisheries-dependent livelihoods—embedded in local communities, kinship, and intergenerational pathways of knowledge transmission (Neis et al. 2013). These fleets are the

largest employment contributors of any fishing sector in NL, with the majority of enterprises coming from the small boat fleet (Sabau and Boksh 2017; FFA 2020). Small boat and inshore fisheries also contribute the largest economic value of all fishing sectors, about 70% of overall landed value (Sabau and van Zyll de Jong 2015; DFO 2022b). Nonetheless, the small-scale and inshore fisheries face challenges including stock variability (Bavington et al. 2004; Mullowney et al. 2014), lack of attention towards their contributions (Neis et al. 2014), and recruitment of young people into the fishing industry (Neis et al. 2013; Allen et al. 2018). These trends are particularly prevalent for the small boat fleet, which has rapidly decreased with time (Sabau and Boksh 2017). Without the needed governance attention for promoting better recognition and outcomes for small-scale fisheries, their long-term survival may be uncertain.

Considering these benefits and challenges, implementation of crucial principles, which support and protect the viability of the small-scale fisheries, is of vital importance. Between the years of 2010-2013, in a process facilitated by the Food and Agricultural Organization (FAO), over 4,000 representatives from more than 120 countries came together to discuss and develop the best set of instruments for governing and sustaining the small-scale fisheries. The process produced the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (SSF Guidelines), a document containing a set of 13 governing principles (shown by Table 1) intended to promote and help secure small-scale fisheries rights and guarantees around the globe (FAO 2015). Since its creation, the document has gained traction globally, with many governments signifying their commitment to implementing the SSF Guidelines into laws and policies. At the 34<sup>th</sup> Committee on Fisheries, held in 2020, the Canadian government was announced as becoming the fifth country to become "Friends" of the SSF Guidelines indicating an opportunity to explore the relevance and applicability of the SSF Guidelines in shaping strategies and policies in Canadian oceans governance (FAO 2020). As such, this research presents an opportunity to explore how principles from the SSF Guidelines can be implemented in NL, a case study in Canada and in the Global North. The setting for this study, a historically fisheries-reliant province in the Global North, is unique. However, there are also potential implications that can come from research in NL fisheries for coastal spaces elsewhere. In this way, NL is ideal for both practical and theoretical contributions in addressing challenges in fisheries sustainability in this region of the world, advancing Blue Justice, and expanding on the work of researchers applying interactive governance theory to fisheries. The research will help understand pathways based in challenges and opportunities in governance to support implementation of the SSF Guidelines in NL and Blue Justice for small-scale fisheries people beyond NL, in Canada and the Global North.

#### **1.2 Context**

Governance of NL small-scale fisheries is multilevel, meaning that international, national, provincial, and local governmental and non-governmental actors and agreements interact to formulate decision-making in fisheries (Song and Chuenpagdee 2015). On the international level, transboundary conservation measures and ocean territory allocations are negotiated primarily by the Northwest Atlantic Fisheries Organization (NAFO), which is an intergovernmental science and management body established in 1978, among signatories in the Northwest Atlantic (NAFO 2017). The United Nations Convention on the Law of the Sea functions as an international legal framework for marine and maritime activities (Johnston 1995). These are important because fish stocks and ecosystems do not abide by national boundary lines

and the ocean is a shared resource. Treaties and agreements on the international scale also play key roles, such as impacting local market access, employment, product value, and processing in NL. These include the North American Free Trade Agreement (now the Canada US Mexico Agreement) (Song and Chuenpagdee 2015) and Canada-European Union Comprehensive Economic and Trade Agreement (CETA) (see Daly and Chuenpagdee 2020). At the federal level, Fisheries and Oceans, Canada (DFO) is responsible for regulation, including stock assessments and quota and license allocations, for commercial, recreational, and Indigenous fisheries inside Canada's Exclusive Economic Zone (EEZ). At the provincial level, Department of Fisheries, Forestry, and Agriculture (FFA) regulates the post-harvest and onshore sector including processing with attention towards improving value and markets. Non-governmental groups at the provincial level include Fish, Food and Allied Workers Union (FFAW-Unifor), representing interests of fishers and fish workers (among other workers) in NL, and the Association of Seafood Producers (ASP), representing the interests of processing companies (Belbin 2010). Finally, on the local level, regionally based groups strengthen capacity for improved benefits from the fisheries. Local organizations focus on issues such as market access, community-building, and education. Some examples are the Petty Harbour Co-operative and Fogo Island Co-operative, the Shorefast Foundation in Fogo Island, Fishing for Success in Petty Harbour, and Food First NL in St. John's (Chuenpagdee et al. 2017). Also occurring on the local level, fishers informally negotiate and govern resources on the water, at home, and on fishing wharves in their communities through individual and collective action (Phyne 1990; Andrews et al. 2021).

One challenge associated with governance that is multi-levelled is integration of norms, values, principles, mandates and decisions among various authorities, structures, and departments. This integration is important for addressing interactions between global, national, provincial, regional, and local actors, institutions, and challenges (Dietz et al. 2003). For instance, interactions between the harvest and post-harvest sectors, which are managed by two different levels of authority in Atlantic Canada—federal and provincial, respectively—presents one major challenge for this sort of integration. In NL, federal and provincial policies and decisions may not always align with federal legal objectives or high-level agreements in the international realm. For example, provincial policy decisions motivated by economic efficiency have not consistently considered social and cultural principles and community knowledge, as called for by high level documents like the SSF Guidelines, or recent amendments to the Fisheries Act (Song and Chuenpagdee 2015; Fisheries Act s. 2.5). Future decision-making may be made more complex as governing actors seek to integrate a more holistic set of principles into decision-making.

#### 1.2.1 Owner-Operator Principle

The owner-operator principle has been central to maintaining community benefits of the smallscale and inshore fisheries in NL (Stephenson et al. 2019). The principle entails that enterprise owners and license holders are autonomous fishing people retaining full rights to make financial or other decisions about their enterprise, also sometimes referred to as "owner-on-board" (Pinkerton and Edwards 2009: 712). According to the 2021 amendments to the Fisheries Act in the Atlantic Fisheries Regulations, titled "Inshore Regulations," which uphold the owneroperator principle, license holders and fishing families retain 100% of the "voting shares," or total sovereignty, of the fishing enterprise by law (DFO 2021b). The owner-operator principle supports the principles of adjacency, which means that those closest to the resource benefit, and community viability (Carruthers et al. 2019), as well as autonomy, dignity and well-being (Pinkerton and Edwards 2009). Owner-operator ensures fishers are the primary beneficiaries of ocean resources, not large companies or wealthy investors (FFAW-Unifor 2021a). Owner-operator seeks to prevent absentee ownership where wealthy investors reap the rewards of fishing from an "armchair" (Pinkerton and Edwards 2009: 710). Owner-operator is a crucial component of investigating implementation of the SSF Guidelines because it ensures that fishers—doing the fishing work and having the expertise on the water—have the right to control and benefit from their operations. Figure 1 traces this principle from policy into law.



Figure 1: Tracing the owner-operator principle in Atlantic Canadian fisheries policy and law

#### 1.2.2 Professional Fish Harvester's Act (1996)

Exploring the professionalization law and its impacts on fishing livelihoods is central to revealing enabling conditions or potential barriers to implementation of the SSF Guidelines. Professional status is what fishers in NL require to obtain and hold fishing licenses and is tied to fishers' legal recognition-two key components of the SSF Guidelines. The Professional Fish Harvesters Act (1996), introduced after the moratorium along with the notion of "core" and "non-core," was the first legal introduction of professionalization in the fisheries. However, the concept was not new. Professionalization was a continuation of pre-moratorium policies, intended to make the fishing industry self-reliant and economically efficient (Schrank et al. 1995; Schrank 1998; DFO 2004). Professionalization was formalized to create barriers to entry into the fisheries and slim down the workforce by retaining only those with the strongest attachment to the fisheries (Clarke 2003). To gain access to emerging fisheries such as snow crab, a harvester had to meet 'core criteria'—tied to professionalization—which included being head of an enterprise, holding key groundfish (or other) licenses, and fishing full-time (DFO 2021b). This structure, based on formalized professionalization through core criteria, had fewer participants than before with higher seasonal and financial investments, and bigger profits (Davis 2015). Those awarded core were allocated larger quotas, access to new and emerging fisheries, and the ability to acquire multiple licenses over time. Those considered "non-core" could continue fishing with the licenses they already had, but with limited access to other species. They also could not pass down or sell their licenses (still the case today).

Professionalization, as it stands today, determines the criteria by which individuals are included or excluded from fisheries access. Professionalization excludes fishers who do not meet education and safety requirements from holding licenses and operating fishing vessels (Professional Fish Harvesters Certification Board [PFHCB] 2022). As such, fishers must be employed full time and qualified to fish through provincial certification, like plumbers or crane operators. Professionalization is an example of federal and provincial authority alignment: a harvester must first be registered and certified as Level 2 Harvester with the provincial Professional Fish Harvesters Certification Board (PFHCB) before obtaining federal licenses. Thus, the PFHCB, responsible for registration, recruitment, and training of fishers—defining who is eligible to obtain a federal fishing license—serves as the gateway to federal species license. Conversely, federal licensing policies and regulations align with the notion of professionalization and the provincial guidelines. Nonetheless, high barriers for entrance into the fisheries created by the professionalization exacerbate recruitment concerns, as the small-scale fishing fleet shrinks with less young people participating (Allen et al. 2018).

#### 1.2.3 Fishing Industry Rationalization

Fishing industry rationalization, like professionalization, has long been a focus of federal and provincial fisheries policies since NL's joining the federation, to solve the perceived problem of excess capacity (Schrank et al. 1995; Cashin 2005; Clift 2011; Greene 2021). Rationalization in fisheries is when smaller fishing operations combine to create fewer larger operations for increased profitability, particularly in the case of quota cuts or price fluctuations (Cashin 2006). Rationalization is linked to implementation of the SSF Guidelines because of its far-reaching

impacts on NL fishing communities, in particular those communities relying on many smallscale operations for community and social viability (Smith et al. 2014). Thus, rationalization has the potential to benefit or hinder efforts towards implementation of the SSF Guidelines, regarding principles such as *Equity and equality* (Principle 5), *Economic, social and* environmental sustainability (Principle 10) and Social and economic viability (Principle 13). Fishing industry rationalization is motivated by the narrative of excess capacity, based on the idea of too many fishers chasing too few fish (Walsh 2011), and the economic efficiency principle (Song and Chuenpagdee 2015). However, this overcapacity narrative might simplify complex problems in resource dependent communities (Dietz 2003). For instance, in the case of NL fisheries, this narrative overlooks inequitable resource sharing arrangements between smalland large-boat fleets and poor market access, which could be harming small-scale viability (Chuenpagdee et al. 2017). Rationalization is intended to provide small boat fishers with greater economic opportunity and larger profits by combining boats and quota so that fishers can catch more fish (Smith et al. 2012). However, prioritizing rationalization as a strategy in fisheries governance has contributed to declining numbers of small boat fishers (Walsh 2011), a trend which may be concerning for future sustainability of this fleet (Smith et al. 2014).

Rationalization strategies include the "buddy-up" crab initiative beginning in 2007 and the enterprise combining program beginning in 2008, which were intended to support small boat and inshore fishing viability through fleet rationalization (FFA 2007). Buddy-up allows two license holders to temporarily combine crab quotas under one enterprise, while enterprise combining, issued one year later, allows fishers to permanently combine quotas in the form of buyouts. During the first five years of the enterprise combining policy, 400 enterprises, or 5% of the total

15

fleet, exited the fishery (Sabau and van Zyll de Jong 2015). Since then, the program has expanded to allow for combining of three quotas under one enterprise with more small-scale fishers exiting each year (Davis 2015).

#### 1.2.4 The Blue Economy

One crucial contextual element of this research is Canada's developing of a Blue Economy strategy, which makes up a key potential challenge or enabling condition for implementation of the SSF Guidelines. The concept of the Blue Economy first emerged in the 2012 UN Convention on Sustainable Development (Silver et al. 2015) and is now being developed by DFO as a future plan for sustainable development along Canada's coasts. The Blue Economy is rooted in an international discourse about sustainable development called the Green Economy (Silver et al. 2015; Voyer et al. 2018) and defined as sustainable development along the world's coasts and in the oceans. In the Canadian context, the Blue Economy is a future long-term strategy of the federal government for economic development of Canada's ocean sectors. Canada's federal government positions itself as a global leader in oceans governance by developing and adopting the Blue Economy program, which is still in the early stages of development. In 2021, Canada's Minister of Fisheries, Bernadette Jordan, stated in the Foreword of the Blue Economy Engagement Paper, "Canada is a leader on the world stage when it comes to ocean conservation and protection, and the same should be true of the global blue economy" (DFO 2021a: 4). In 2022, DFO issued the "What We Heard" report, communicating public responses from a year of consultations and engagement (DFO 2022a). Major topics in this paper include equity, diversity and climate change. The Blue Economy will be significant for all coastal provinces in Canada, in

16

particular for NL, which is the most reliant on ocean resources of any province (Ganter et al. 2021).

Many authors recognize the linkages between the Blue Economy and outcomes for small-scale fishing people (Ayilu et al. 2022; Cohen et al. 2019; Engen et al. 2021). Jentoft (2022: 38) asserts, "If states do nothing to implement the SSF Guidelines, the Blue Economy will come at a loss to small-scale fishing people." Canada's Blue Economy papers discuss many ideas for development using language which suggests the forthcoming plan will share both alignments and contradictions with the SSF Guidelines (DFO 2021a, 2022a). As such, there is urgency to clarify how plans in the Blue Economy can support small-scale fisheries values, and principles in the SSF Guidelines, including equity, equality, inclusivity, and meaningful consultation and participation, among others.

Blue Justice is a critical approach about how "blue growth" initiatives such as the Blue Economy strategy will impact small-scale fisheries people. Blue Justice has caught the attention of countless researchers in only a short time (Jentoft et al. 2022; TBTI toobigtoignore.net). This thesis, joining in efforts of these scientists, provides steps and pathways for moving towards Blue Justice through implementation of the SSF Guidelines in NL, Canada. Ensuring Blue Justice in a Blue Economy will mean securing a just and sustainable space for small-scale fisheries people, even through economic and social changes.

#### **1.3 Study Components**

This research includes two components. The first component (Study 1) investigates the extent to which the current laws and policies for NL small-scale fisheries align with the SSF Guidelines. Study 1 addresses Research Question 1, which asks, to what extent are present laws and policies aligned with the SSF Guidelines? Study 1 includes a document review to identify, from a legal and policy perspective, where principles in the SSF Guidelines are present and absent in the laws and policies. Study 1 is primarily concerned with investigating interactions between second order laws and policies and third order principles. The second, empirical, component (Study 2) addresses the gaps and strengths in implementation of principles in the first order from fisher perspectives. Study 2 addresses Research Question 2, which asks, according to fishers, which principles require the most action and attention? Study 2 includes semi-structured interviews with 38 fishers in the case study region to identify where principles in the SSF Guidelines are implemented strongly, and where they need a lot of work. Study 2 addresses interactions between third order principles and first order outcomes. Taken together, the two components of this research address Research Question 3, which asks what pathways, based in barriers and opportunities, are there for implementation of the SSF Guidelines in NL small-scale fisheries? The research describes how the SSF Guidelines relate to NL and potentially the Global North, why SSF Guidelines implementation matters in a Blue Economy, and a few key pathways for implementation. This research also advances theoretical frameworks for better sustaining smallscale fisheries communities, such as interactive governance theory and transdisciplinarity.

#### 1.3.1 Study One: Legal Perspective

Study 1 is a qualitative examination of 105 documents including laws, policies and strategies relevant to small-scale fisheries in NL to investigate their alignment with the SSF Guidelines. Laws and policies considered in Study 1 include federal and provincial fisheries specific and non-specific laws and policies. Study 1 uses a rapid appraisal framework developed by Too Big To Ignore (the Legal Template), which systematically tracks which principles are represented where in laws and policies (TBTI 2020). To analyze the data from the Legal Template, Study 1 employs the eight legal categories identified by Nakamura et al. (2021). These include 1) legal definition, 2) tenure and/or labor rights, 3) participation in fisheries management and conservation, 4) preferential/ exclusive access, 5) public financial mechanisms, 6) gender laws and policies, 7) climate change laws and policies, and 8) representation of small-scale fishers in institutional arrangements. Ultimately, this knowledge provides a basis for identifying pathways, based in barriers and opportunities, for implementation of the SSF Guidelines. Study 1 reveals the gaps and strengths in alignment between laws and policies and the SSF Guidelines, and thus shows key steps which can be taken in the second order for advancement of principles in the third order and Blue Justice.

#### 1.3.2 Study Two: Fisher Perspectives

Study 2 is an empirical study including 38 semi-structured interviews with small-scale and inshore fishers in the case study region. While Study 1 shows what legal and policy documents require for greater alignment, Study 2 gives insight into where action needs to happen for better

enaction of principles in the first order. The research instrument in Study 2, approved by Memorial University Interdisciplinary Committee on Ethics in Human Research (# 20220673-AR) uses a sorting technique to elicit fisher perspectives on where the most action and attention is needed for implementation of the 13 principles from the SSF Guidelines. Through quantitative and qualitative fisher responses, Study 2 reveals where principles have been sufficiently included in decision-making and which principles require the most work for inclusion. Study 2 also identifies adapted definitions and interpretations of the 13 principles for NL, vital for implementation of the SSF Guidelines in this context.

#### **1.4 Research Questions**

Research Question 1, addressed in Study 1, asks, to what extent do laws and policies align with principles in the SSF Guidelines? Two central questions guide the analysis for Research Question 1. First, how do the laws and policies align with topics covered by the SSF Guidelines? And second, using insights from the analysis, what are legal opportunities for further alignment to advance Blue Justice? Thus, Research Question 1 explores alignment between laws and policies and SSF Guidelines principles, as well as opportunities and pathways for advancing alignment.

Research Question 2, addressed in Study 2, asks, according to fishers, which SSF Guidelines principles require the most action and attention for implementation in NL? Interviews and analysis were guided by three questions. First, which principles require the most action and attention, and are thus highest priority, according to fishers? Second, how do principles in the

SSF Guidelines relate to fisher experiences in NL? And third, how much agreement or disagreement is there within fisher groups? Research Question 2 identifies priority areas, the distinct meaning of the SSF Guidelines in NL, and the extent to which fishers agree or disagree within groups based on fleet and region.

Research Question 3 asks, what are some key pathways, based in barriers and opportunities, associated with advancing alignment with the SSF Guidelines for Blue Justice in NL? Research question 3 is guided by two questions. First, how do findings from Study 1 and 2 interact/ align? And second, what are some key pathways based in these interactions which can be taken to move towards increased alignment for small-scale fisheries sustainability and Blue Justice?

To answer Research Question 3, a figure with two axes was created to reflect the alignment between Research Questions 1 and 2 (Figure 2). The x-axis describes coverage in the laws and policies, and the y-axis describes priorities according to fishers. Principles in Quadrant 1 have ample legal basis and are considered high priority by fishers. Quadrant 1 shows a gap between how principles are represented in laws and how they are operationalized on the ground. Principles in Quadrant 2 have high coverage in laws and policies and are considered low priority by fishers. Quadrant 2 principles can be considered strengths both in the second and first orders. Principles in Quadrant 3 have low legal coverage and are considered overall low priority by fishers. Principles in Quadrant 3 can be considered as implemented from the bottom-up, in fisheries communities even without legal support. Principles in Quadrant 4 have low coverage in laws and policies and are considered high priority by fishers. It is principles in this quadrant which require the most work, considering these principles are high priority, but have little legal

21

basis for implementation. However, these principles also represent areas of alignment between the gaps found in Study 1 and 2.



Figure 2: Mapping of principles based on Study 1 (coverage) and Study 2 (priority), response from all fishers (38), including small boat (<40 ft) and inshore (40-65 ft).

Taken together, Research Questions 1, 2, and 3 have the potential to inform policies for NL small-scale fisheries, particularly in the context of the Canadian government's forthcoming Blue Economy strategy. Such policies could explicitly recognize the importance of the small-scale fleets, encourage market viability, and promote gender inclusion and recruitment of young people for social sustainability of the small-scale sectors and fisheries-dependent communities. Though implementation of the SSF Guidelines is complex, the knowledge contained in this
thesis is now available for identifying some key pathways for implementation of the SSF Guidelines, supporting Blue Justice for small-scale fisheries in NL and elsewhere. It is not the time for the federal government to be passive about implementation of the SSF Guidelines. On the contrary, this thesis provides a few clear pathways where actions can be taken to move towards equity, inclusivity and the protection of invaluable small-scale fisheries ways of life.

### **1.5 Thesis Structure**

This chapter explained the purpose, research questions, core concepts, background, and context. Chapter 2 includes a literature review and describes the theoretical framework, which guides each step of the research, including the research questions, methodology, and analysis. Chapter 3, addressing Research Question 1, describes to what extent laws and policies align with the SSF Guidelines and key gaps in alignment (Study 1). Chapter 4 presents Study 2, describing which principles are fisher priorities and the significance of the principles for NL fishers, as well as where the gaps and strengths are in implementation of the SSF Guidelines principles in the first order. Chapter 5 discusses alignment between Study 1 and 2, with some discussion about major topics revealed by the thesis and pathways for policymaking. Chapter 6 concludes this study with personal reflections and suggestions for future research.

# **Chapter 2: Literature Review and Theoretical Framework**

Drawing from academic literature, this chapter identifies the practical and theoretical areas for contributions associated with SSF Guidelines implementation in NL and beyond. This chapter begins with an explanation of small-scale fisheries in the Global North to identify NL, Canadian small-scale fisheries as needing protections, rights and guarantees through application of the SSF Guidelines. Next, this chapter explores some linkages between Blue Justice and sustainable development as outlined by the Blue Economy discourse. This literature highlights the importance and urgency of this work, as well as the need for transdisciplinary perspectives in plans for oceans development. Following the literature review, I move to a discussion of the theoretical frameworks of this research, which connect to small-scale fisheries' complexity and need for bottom-up and participatory governing methods, particularly in light of the Blue Economy. The two theories that guide this thesis, interactive governance theory and transdisciplinarity, are useful for studying small-scale fisheries and finding pathways towards Blue Justice.

## 2.1 Small-Scale Fisheries in the Global North

Without any sense of what is shared between small-scale fisheries people around the world, their collective and unifying characteristics, and thus significance as a group might be underrecognized and easily dismissed (Johnson 2006; Jentoft 2020). This also applies to NL, where it is necessary to describe how these fisheries might be considered "small-scale" to make clear the need to implement the SSF Guidelines. Johnson (2018: 3), in describing the significance of small-scale fisheries, states "they stand for a set of values that contrast with the capital-intensive, profit oriented, mobile capitalist enterprise that is typical of the large-scale and particularly, industrial sector of fisheries." Governance actors including policymakers and elected officials must openly acknowledge the diverse values of the small-scale sectors, including fisher well-being and community vibrancy, or otherwise small-scale fisheries people might become disembedded from communities (Johnson et al. 2018), or disempowered relative to more profitable sectors and interests (Jentoft 2022). Governments must promote and encourage small-scale fisheries' vital contributions to food security, local economies, environmental stewardship, and much more, if these contributions are to be sustained (Chuenpagdee 2011b). Therefore, it is necessary to pay special attention to the small-scale fisheries and their diverse benefits.

Defining small-scale fisheries universally and quantitatively has been what Johnson (2018: 3) refers to as a "mug's game," in other words highly difficult. Small-scale fisheries occur in dispersed and dynamic settings including the ocean, intertidal zones, inland and offshore, in the marketplace, households, and processing facilities, and are happening all over the globe, with women, men and children contributing, meaning they are extremely diverse (Moreau and Garaway 2021; Jentoft et al. 2010). The Food and Agricultural Organization (FAO) does important work to record and make known quantitative statistical benefits and attributes of small-scale fisheries, including the contributions of women (FAO 2021). Nonetheless, small-scale fisheries are hard to track, drastically variable, and embedded in place (St. Martin and Hall-Arber 2008), meaning that their quantitative values and benefits—e.g. number of participants, economic value—cannot be extracted from their qualitative aspects, which make them "unique and meaningful" (Johnson 2018: 3).

Scholars characterize small-scale fisheries by the large number of small-scale fisheries people around the globe (Pomeroy and Andrew 2011), the values of small-scale fisheries (Johnson et al. 2018; Berenji 2020; Coulthard et al. 2011), and their many contributions (Teh and Pauly 2018; Loring et al. 2019), including poverty alleviation, food security (Béné et al. 2007), well-being (Weeratunge et al. 2014), embeddedness in local communities (Jentoft 2014), resilience (Allison and Ellis 2001), and values-driven rather than profit-driven approach to fishing (Johnson et al. 2006). "Small-scale fisheries people" is a term meant to be inclusive towards all people involved in small-scale fishing along the value chain including pre- and post-harvest activities. It is important to recognize the vital roles and contributions of people on shore that are often filled by women and other marginalized groups (Koralagama et al. 2017). Small-scale fisheries are also characterized by their vulnerability (Béné 2009; Knight et al. 2020). Small-scale fisheries people experience all the risks that go along with being self-employed. These include unreliable markets, up front investments, lack of benefits and no guaranteed salaries or wages. Yet in turn, small-scale fisheries people often gain autonomy and sense of purpose in their livelihoods. Wage earning jobs may be more reliable, but small-scale fisheries people often have livelihoods which provide them with the opportunity to "self-actualize" goals according to their own set of values (Johnson 2006; Daw et al. 2012; Jentoft 2020; Thiessen and Davis 2008). Roles in the postharvest sector provide individuals in fisheries communities, often women, the power to market their own products and determine a fair price. Thus, post-harvest work often provides women with the opportunity to act as "small-scale entrepreneurs" in these roles (Solano et al. 2021: 2). Small-scale fisheries form the basis of autonomy, purpose, and identity for fisheries people, both

in the harvest and post-harvest sectors (Pinkerton and Edwards 2009; Pinkerton and Davis 2015; McGoodwin 1991; Acheson 1988).

Until recently, there was not much attention towards small-scale fisheries in the Global North (Jentoft 2014), which means that stating there are small-scale fisheries in NL presents a challenge. The technological advancement, financial success, and specialization of the small-scale sectors in the Global North contrasts with dominant images of small-scale fishing people as impoverished (Béné 2003), artisanal (Amadu et al. 2021), and technologically basic (Johnson 2006). Consequently, policies valuing, imagining, and promoting small-scale fisheries in the Global North are underdeveloped. However, a growing body of literature shows that small-scale fisheries do exist in the developed world and share many characteristics with other small-scale fisheries worldwide. Global North fisheries are also often embedded in communities, gender imbalanced, marginalized, and reliant on wild caught fish for food (Jentoft 2014; Kleiber et al. 2017; Teh et al. 2020; Lowitt 2014; Smith et al. 2010; Neis et al. 2014; Szymkowiak 2020). As such, it is important to look for links between Global North small-scale fisheries and the SSF Guidelines.

### 2.1.1 Gender Equity and Equality

*Gender equity and equality*, Principle 4 in the SSF Guidelines, has been one of the major links between Global North small-scale fisheries and principles in the SSF Guidelines, serving as justification for the existence of small-scale fisheries in the Global North (Kleiber et al. 2017; Teh et al. 2020). Gender is not only a focus of small-scale fisheries social science research in NL (Neis et al. 2013; Cahill et. al 1993; Bavington et al. 2004) but also of Canada's forthcoming Blue Economy strategy. Gustavsson et al. 2021 have brought to light that gender equity is also a crucial component of Blue Justice. Thus, in some ways gender can serve as the lynchpin to bring many of these various conceptual frameworks—the SSF Guidelines, small-scale fisheries in the Global North, the Blue Economy, and Blue Justice—together.

Fisheries women in NL, and in the Global North more generally, face challenges which are both distinct and similar to women in the developing world (Gustavsson et al. 2021). Cahill et al. (1993: 6), in a book written in conjunction with DFO that extensively covers the role of women in the Newfoundland fishery, write, "Discrimination against women was reinforced by government policies; for many years, women who worked in the boats with their husbands were ineligible for unemployment insurance." Despite Canada being a Global North country with strong gender equity laws, institutional discrimination was still prevalent for women in the NL fishery in the 1990s, and potentially still today. Neis et al. (2013) in a study about NL small-scale fisheries use previous research to describe the role of women in recruitment of young people into the fishing industry. These authors show how Atlantic Canadian fisheries governance has marginalized the pre- and post-harvest roles of women by recognizing fisheries mainly from the harvest perspective. Similarly, Yodanis (2000), in an empirical study based on in-depth interviews, show that women are excluded from being "fishermen" because of the narrow characterization of fishing as on-the-water harvest. Other Global North examples are prevalent as well. In Alaska, Yang-Gonzalez (2018) showed that women faced a multitude of challenges socially and politically to gaining access to their own fishing boats and licenses, even while their participation as crew members increased. In a report on gender inclusion in agriculture,

aquaculture and fisheries on Prince Edward Island, Canada, authors described how "genderblind" access policies created additional barriers for women (Government of Prince Edward Island 2020). Gender-blind institutionalization of fisheries access in the form of professionalization, limited-entry, and privatization has been shown to reinforce pre-existing inequities not just on Prince Edward Island, but across North America (Donkersloot et al. 2020; Carothers 2015; Baruah and Biskupski-Mujan 2021).

### 2.1.2 Recognition and Adaptation

There have been long-standing efforts in research to recognize small-scale fisheries in Canada (Charles 1989) and recently, this effort has been building (Chuenpagdee et al. 2017; Daly and Chuenpagdee 2021; Andrews, Knott and Chuenpagdee forthcoming). As such, there needs to be more attention and research on how the SSF Guidelines can be implemented in Canadian contexts. The SSF Guidelines were developed as an essential guidebook to governments for protecting the rights of small-scale fisheries people (Nakamura et al. 2021). However, SSF Guidelines implementation requires adaptation to specific contexts. As many qualities as there are which small-scale fisheries share across the Global North are those which make them distinct and wicked. Thus, not all guiding principles from the SSF Guidelines to context is one governance problem which this research addresses. Identifying which principles are priorities, and how small-scale fisheries challenges can be addressed in laws and policies will be vital for adapting the SSF Guidelines to the needs of small-scale fisheries across a broad spectrum of geographies, including in NL.

## 2.2 Blue Justice and "Uneconomic" Growth

The Blue Economy will bring about uncertain implications for small-scale fisheries people, providing both opportunities and challenges to implementation of the SSF Guidelines. Daly and Farley (2011: 16) introduce the concept of 'uneconomic growth,' which occurs when economic growth "costs more than it is worth." Sabau and van Zyll de Jong (2014) apply this concept to NL, where fisheries policies have prioritized economic growth, despite ecological limitations. Authors have shown that one of the greatest challenges Atlantic Canadian small-scale fisheries face today is integrating social and community principles, or objectives, into a system that prioritizes economic growth (Stephenson et al. 2019). Both sets of these principles, social and economic, come into play in competing discourses surrounding the Blue Economy. Since its emergence, the Blue Economy has been associated with varying discourses, including the ocean as natural capital, livelihoods, good business, and driver of innovation, and varying principles, including equity, inclusivity and economic growth (Voyer et al. 2018). Thus, the Blue Economy is portrayed as serving many, possibly competing, interests in the ocean space, for instance offshore energy, fisheries, conservation, tourism, and shipping. This cacophony of various interests creates what Cohen et al. (2019) refer to as a "growing squeeze" for small-scale fisheries people, as their access to resources and space has the potential to shrink in a growing Blue Economy. Thus, there are opportunities to implement the SSF Guidelines to protect against growth narratives. Incorporating social and community principles into laws and policies can advance Blue Justice in a Blue Economy, given the potential for a growing squeeze for smallscale fisheries people. While the Blue Economy discourse unfolds into plans for action,

implementation of the SSF Guidelines will be an essential part of ensuring that small-scale fisheries rights are protected, and that small-scale fisheries people do not end up paying the costs for economic growth in a Blue Economy.

Determining how a Blue Economy will play out for small-scale fisheries people requires analysis of the possible benefits and tradeoffs of competing principles and interests. These benefits and tradeoffs might be best explained by scholars' reflections on the concept of 'sustainable development,' which has long been criticized for lack of clarity. Lélé (1991) points out that plans for sustainable development have far-reaching goals, with little explanation as to how these will be carried out. Cohen et al. (2019) find this also to be true in the Blue Economy discourse, which aims for economic growth and equity, with little explanation as to how benefits can be distributed to marginalized people, like small-scale fisheries actors. Moreover, representations of ocean space in the Blue Economy discourse are imprecise—what Garland et al. (2019: 11) refer to as "placeful and placeless representations." As such, the Blue Economy reveals little about who will be supported or further pushed to the side as is it being carried out. Such lack of clarity may be linked to a conflict between the image of unlimited economic growth promoted by sustainable development discourses like the Blue Economy, and the realities of a world with increasing natural resource limitations and climatic uncertainty (Sabau and van Zyll de Jong 2015; Daly et al. 2021). Ideological and material conflicts within sustainable development discourses harken back to Daly and Farley's (2011) concept of uneconomic growth. Thus, the SSF Guidelines can provide clarity through the challenging process of planning for a Blue Economy by better grounding Blue Economy goals and principles in small-scale fisheries livelihoods.

Considering that Canada's Blue Economy is in its early stages of development, there is still space for shaping Blue Economy plans with principles from the SSF Guidelines. This is important, considering that outcomes of a Blue Economy are inherently linked to outcomes for small-scale fisheries people (Jentoft 2022). If the Blue Economy enacts practices of uneconomic growth, with harmful ecological practices and inequitable growth, there will be costs to small-scale fisheries people. There is a need to clarify Blue Economy strategies to advance a particular kind of economic growth that also serves fisheries people.

The concept of Blue Justice can be used to characterize concerns for small-scale fisheries in a Blue Economy. Blue Justice drives questions about how laws and policies can advance just and sustainable small-scale fisheries, be inclusive of small-scale fisheries people and diverse ways of being, and make efforts to reverse past wrongs (Chuenpagdee 2020; Schreiber et al. 2022; Andrews et al. 2022). The SSF Guidelines provide a set of principles that can be used to direct decision- and policy-making toward Blue Justice for small-scale fisheries. The SSF Guidelines can be useful in NL for finding pathways towards Blue Justice, understanding what Blue Justice means for NL fisheries communities, and how these ideals can be advanced by the Blue Economy.

Transdisciplinarity, which values academic and non-academic voices and knowledge, may greatly contribute to carrying out Blue Justice in a Blue Economy (Idrobo et al. 2022; Jentoft and Chuenpagdee 2022). Trandisciplinary approaches will be vital to every aspect of development of a Blue Economy. Consultation is one way to think of applying transdisciplinary approaches to

the Blue Economy. However, there is a deeper interpretation of how transdisciplinarity can inform planning. For instance, transdisciplinary decision-making structures could be inclusive by decentralizing Canadian fisheries decision-making spaces from Ottowa and putting small-scale fisheries people into decision-making spaces which are traditionally reserved for those in policy and government. Transdisciplinarity can inform planning for development of coastal spaces by positioning planners in the areas where that development will occur. Transdisciplinary ways of planning can position the people presently operating businesses and livelihoods on the ocean at the center of ocean planning and envisioning, for regionally specific and ecologically-sound outcomes and solutions. Transdisciplinary approaches require not just thinking about how plans can develop, but also reflecting on trends and present challenges with those who will be impacted by future plans. Making clear connections between fisher experiences and governance principles will be key for addressing these challenges and defining Blue Justice in NL (Schreiber et al. 2022; Bavinck et al. 2018).

# 2.2.1 Key Gaps

This project addresses key gaps in the literature described above. First, authors have connected the notion of small-scale fisheries to the Global North, including in Canada. However, more work is needed to adapt the SSF Guidelines to specific Global North contexts and identify how principles from the SSF Guidelines apply. There is a gap in information which can spur Global North government organizations to consider that small-scale fisheries in their own regions share qualities with small-scale fisheries elsewhere and thus require the same protections and guarantees. Second, there is little knowledge of how (or why) the SSF Guidelines might be useful in a Blue Economy. Considering that the Blue Economy is a recent development, the SSF Guidelines have not yet been explicitly linked to many plans in a Blue Economy by government planners and policy-makers. Moreover, there are gaps in research on how the SSF Guidelines can advance Blue Justice in a Blue Economy. Third, there is a gap in the application of transdisciplinary approaches to planning processes such as the Blue Economy. While the Blue Economy has incorporated consultation, there are further ways that, as a Blue Economy unfolds, different governance structures and roles can be explored to ensure that small-scale fisheries people are involved in decision-making around coastal development and envisioning what that development means or looks like in Canada. There is also the timeliness of this work, which occurs simultaneously with the development of Canada's Blue Economy strategy, and strategies like it around the world. This project seeks to find pathways for utilizing the SSF Guidelines as an instrument of change to ensure that economic growth does not mean costs for small-scale fishing people.

## 2.3 Interactive Governance: The Three Orders and How They Apply in NL

Identifying the impacts of economic development on small-scale fisheries peoples in the Global North and implementation of the SSF Guidelines is a problem which can be addressed through the theoretical framework of interactive governance theory (Jentoft and Bavinck 2014; Kooiman et al. 2005). Interactive governance theory helps understand this problem by illuminating sets of interactions between, for instance, principles in the SSF Guidelines and laws and policies for NL small-scale fisheries. A key element of interactive governance theory is the notion of the three governance orders, which help define and analyze these interactions and clarify different parts of the system (Kooiman 2003). The first order is defined as the everyday actions and negotiations for problem-solving such as daily decisions fishers make about gear setting, varying decision outcomes each spring for crab quotas, or efforts to change laws and policies. The second order is related to institutional arrangements, rules and structures framing the first order, for instance, provincial and federal laws and policies that affect fisheries, rule-making arrangements which are long-standing, or decision-making structures. The third order, or the meta-order, refers to values, images and principles, which shape decision-making and underlie the entire governing system. Values are, according to Song et al. (2013: 168), "ideals that prioritize modes of conduct or desirable qualities." A value cited in NL is egalitarianism, which has helped fishing communities maintain resilience and adaptability through price fluctuations and political upheaval (Davis 1986a, 1986b; Pocius 1979; Schrank 2005; Neis et al. 2013). Images are ways to envision the world (Song et al. 2013). An image from the Blue Economy discourse is the ocean as frontier (Cohen et al. 2019). Principles refer to a quasi-code for how governance should function (Kooiman and Jentoft 2009; Chuenpagdee 2011a). Examples of principles from the SSF Guidelines include Equality and equity (Principle 5), Non-discrimination (Principle 4), and Human rights and dignity (Principle 1). Below is an illustration of the three orders, shown by Figure 1.



Figure 1 The three orders of interactions for interactive governance theory

Transdisciplinary approaches pair well with the theory of interactive governance. Small-scale fisheries, due to diversity (diverse perspectives and ways of life within and between small-scale fisheries), complexity (many different actors, living and non-living, human and non-human at play), and scale (happening spread apart, across land, water and wetlands) have been identified as "wicked problems" in coastal governance (Jentoft and Chuenpagdee 2009). Rittel and Weber (1973) came up with the idea of wicked problems to describe complex social dilemmas which are nearly impossible to describe, much less solve or plan for. Words Rittel and Weber use to describe wicked problems, in opposition to "tame" problems, include "malignment," "vicious," "tricky," and "aggressive" (Rittel and Weber 1973: 160). Wicked problems require ongoing, sometimes challenging, interaction and engagement between all levels of involved groups and individuals so that the educational process is built into the decision-making process. Many

scholars have reached the conclusion that structures which are predominantly top-down and centralized are unable to account for the complexity evident in natural resource use systems (Edge and McAllister 2009; Hauzer et al. 2013; Pahl-Wostl 2009; Lebel et al. 2010; Hurlbert and Gupta 2015). Being inclusive of diverse perspectives in governance, as can be seen by transdisciplinary approaches, can account for complexity, even when this inclusiveness causes conflict or disagreement. Inclusion of stakeholder knowledge becomes a way to reflect and inhabit this complexity, addressing complex problems with complex decision-making processes. In this vision, governance is "a process which is inclusive and self-correcting" (Jentoft and Chuenpagdee 2009: 555) where fisheries become a space of ethical decision making (Foley and Mather 2016).

Below is an explanation of the three orders of interactive governance theory and how they relate to the context of NL. How the three orders relate to NL is vital for understanding trends which enable or challenge implementation of the SSF Guidelines. This explanation begins with the third order because principles guide, underlie, motivate and direct decision-making processes in the second order and decision-making outcomes in the first order. Following is the second order—how decision-making is structured, who is involved, and what factors are considered framing and influencing outcomes in the first order. Finally, the first order is explained last. Decision outcomes in the first order influence and formulate processes in the second order, for instance which principles (third order) guide future decision-making structures (second order). As such, the three orders constantly interact and feed into one another.

### 2.3.1 Third Order Principles

Principles are invoked and enacted by laws and policies. Examples of principles from the SSF Guidelines include Equity and equality (Principle 5), Non-discrimination (Principle 4), and Human rights and dignity (Principle 1). An assessment of principles, and their interactions with other components of the governing system, allow for clearer distillation of past trends and future possibilities. In NL, Andrews et al. (2022b: 243) find that principles are "invoked, weakened, strengthened, and made more explicit in law and policy." In other words, principles are reprioritized and exchanged over time, making fisheries governance in NL a complicated web to untangle. Song and Chuenpagdee (2015) find that principles represented by government decisions at times contradict those outlined in laws and policies, or high-level agreements. For example, both Song and Chuenpagdee (2015) and Andrews et al. (2022b) find that provincial governmental decisions have been guided by economic efficiency over equity. This was true regarding the provincial government's decision to allow corporate concentration in the processing sector, despite laws and policies which stipulated otherwise. A study of principles revealed contradictions in laws and decision-making, as well as potential outcomes for future decision-making.

### 2.3.2 Second Order Law and Policy

The second order, referred to as the meso-order, consists of institutions, framing and influencing momentary actions and outputs in the first order. These institutions are guided by values, images and principles in the third order (Kooiman 2005). Examples of these institutions most relevant

for this paper are laws and policies, but the meso-order also includes rules, customary practices, recurring meetings, and governmental departments and agencies. In NL, Department of Fisheries and Oceans (DFO) is responsible for making decisions concerning fish stocks, conservation, quotas, and seasonality (DFO 2021c). Through co-management practices, fishers have formalized input in decision-making concerning quota and seasonality, with little other formalized involvement. In these second order arrangements, fishers are represented by fleet committees, otherwise known as advisory councils, with members elected through FFAW-Unifor. Fisher advisory councils make recommendations on allocations and seasonal openings and closures, as well as other issues such as the establishment of Marine Protected Areas (MPAs) during scheduled meetings with DFO before season openings. Scientists provide input for decisions based on stock assessments. DFO holds the final decision-making power.<sup>1</sup> The Standing Fish Price Setting Panel is a decision-making institution without direct involvement from DFO, occurring provincially (Cashin 2005). The panel is a third party responsible for facilitating collective bargaining between FFAW-Unifor and Association of Seafood Producers to determine fish prices (Collective Bargaining Act 1970). These arrangements must adequately represent small-scale fisheries perspectives in governance institutions and arrangements if they are to be aligned with the SSF Guidelines.

<sup>&</sup>lt;sup>1</sup> Information on decision-making arrangements in the second order was gathered from DFO Integrated Fisheries Management Plans for NL for the following species: scallop, groundfish, capelin, lobster, northern shrimp, mackerel, and snow crab.

### 2.3.3 First Order Events and Outcomes

Since the moratorium, first order outcomes under provincial and federal jurisdictions have often been motivated by economic principles in the third order (Song and Chuenpagdee 2015).<sup>2</sup> This was true regarding the opening of international trade routes, and introduction of CETA (Daly and Chuenpagdee 2020), as well as the acquisition of provincial processing by the foreign monopoly Royal Greenland (Andrews et al. 2021). The elimination of prohibited direct sales by fish harvesters can be seen as motivated by economic values of free market exchange and has greatly benefited small-scale fishers' ability to market and sell their own products, as well as consumers (Chuenpagdee et al. 2017). DFO's decision to introduce buddy up and enterprise combining policies in 2007 and 2008, respectively, represent first order changes intended to improve the economic viability and efficiency of the inshore and small boat fleets (Walsh 2011).

While first order outcomes have often been motivated by economic efficiency in NL, not all of them were. There have also been first order outcomes guided by principles such as equity and adjacency. This was true regarding the elimination of the LIFO (last-in-first-out) shrimp policy (Foley and Mather 2019). Advocated against strongly by FFAW-Unifor, the LIFO policy stated that the last to receive shrimp quotas (last-in) would be the first to lose their quota in an overall reduction (first-out). Because offshore licenses had been issued in the 1970's, before most inshore licenses which were not issued until after the moratorium, LIFO

<sup>&</sup>lt;sup>2</sup> Though many of these first order decisions result in second order institutions, for instance policies or longstanding agreements, the decision itself can be understood as a first order event, which influences the second order.

disproportionately impacted the inshore fleet and was successfully lobbied against by the inshore union. Owner-operator policies are also motivated by adjacency and equity, among other principles in the SSF Guidelines, and have been strengthened from policy into law, in large part due to lobbying by FFAW-Unifor.

There have been many changes since the moratorium, including the target species' of the small scale fleet, requirements to obtain licenses, cost of licenses, the size of small-scale enterprises, and the social structure of outport communities. NL inshore and small boat fisheries are generating more economic value than ever before, and snow crab, the largest economic producer in NL, seems to be relatively healthy with quota increasing from the years 2021-2022 (DFO 2022d). However, if governance does not prioritize fisheries communities in decision-making, it is unlikely that small-scale fisheries, plants and plant workers, wharf infrastructure and spin-off jobs and industries will continue to thrive.

## 2.4 Summarizing Gaps and Prospects

Small-scale fisheries in NL may not reflect traditional interpretations of small-scale, yet they share many attributes with small-scale fisheries worldwide, leaving room to explore how the SSF Guidelines apply and pathways for their implementation. Nonetheless, there are specific components of the small-scale fisheries in NL, which are not yet known, including the extent to which laws and policies are in alignment with the SSF Guidelines, and which gaps in Blue Justice are experienced by fisheries people. Interactive governance theory and transdisciplinarity are key for addressing the issues faced by small-scale fisheries in NL *and* the Global North to

identify interactions and components which may be creating barriers, or opportunities, to learn about and advance Blue Justice.

# Chapter 3: Increasing Legal Alignment with the Principles of Just and Sustainable Small-Scale Fisheries in Newfoundland and Labrador, Canada

Lillian Saul<sup>3</sup> Evan J. Andrews

Ratana Chuenpagdee

Using NL as a case study, this chapter examines alignment between the SSF Guidelines and the laws and policies applying to small-scale fisheries in the province (Study 1). Interactive governance theory is used as an analytical lens to investigate opportunities for strengthening alignment. Two central questions guide the analysis for Study 1. First, how do the laws and policies align with principles and topics covered by the SSF Guidelines? And second, using insights from the analysis, what are legal, policy and practical opportunities for further alignment to advance Blue Justice? Drawing on sources such as federal and provincial laws and policies and secondary literature, the analysis reveals that while there is ample coverage of the SSF Guidelines in law and policy, key opportunities exist for stronger alignment to enhance protections for small-scale fisheries. These include better integration of rights and assurances in legislation and policy frameworks, including distinct legal recognition and representation for the small-scale fishing fleet, and the introduction of secure access and tenure rights for small-scale fisheries.

<sup>&</sup>lt;sup>3</sup> This chapter is submitted in manuscript format to Too Big To Ignore the Legal Book 2022.

### **3.1 Introduction**

The SSF Guidelines help advance justice and equity for small-scale fisheries, including increased visibility of small-scale fisheries people and enhancement of small-scale fisheries rights. Endorsed in 2014 at the Thirty-first Session of the Committee on Fisheries (COFI), the SSF Guidelines have gained traction globally, where governments have expressed commitment to implementing them into laws and policies in their respective jurisdictions. Central to the SSF Guidelines are thirteen principles, including principles promoting *Human rights and dignity* (Principle 1), *Gender equity and equality* (Principle 4), *Equity and equality* (Principle 5), *Consultation and participation* (Principle 6), and *Holistic and integrated approaches* (Principle 12). Integration of these principles in legal and policy frameworks is particularly relevant in countries like Canada. At the Thirty-fourth Session of COFI (2020), Canada was the fifth country to become 'Friends of the SSF Guidelines.' At about the same time, the Canadian government began to develop the Blue Economy strategy (DFO 2021a).

Thus, among growing attention towards small-scale fisheries, there is also uncertainty in a forthcoming Blue Economy with strong emphasis on economic growth. Emerging at the 2012 United Nations Convention on Sustainable Development, the Blue Economy focuses on sustainable economic growth in the world's ocean sectors (Silver et al. 2015). Since its emergence, there have been varying interpretations of a 'blue economy' based in what the ocean can provide for society, including as a source of natural capital, support of livelihoods, opportunity for good business, and driver of innovation (Voyer et al. 2018). Across these interpretations, researchers and practitioners have highlighted concerns about the Blue

Economy's central focus on economic growth and modernization and its potential consequences for small-scale fisheries including degradation of ecosystems and infringement on fishing grounds from other industries (Cohen et al. 2019). In turn, research has recognized the inherent linkages between the Blue Economy and outcomes for small-scale fisheries, asserting that the implementation of the SSF Guidelines will be crucial for supporting the rights, livelihoods, and well-being of small-scale fisheries people in a global Blue Economy (Ayilu et al. 2022; Engen et al. 2021; Jentoft 2022).

In 2018, at the 3<sup>rd</sup> World Small-Scale Fisheries Congress, Dr. Moeneiba Isaacs, University of the Western Cape, argued for 'Blue Justice' to characterize concerns for small-scale fisheries in a Blue Economy. Blue Justice refers to diverse aspects of rights and protections for small-scale fisheries, including representation of small-scale fishers in ocean development, environmental protections, and equitable sharing of resources, signaling to goals of inclusivity, reversing past wrongs, and preserving the diverse livelihoods of small-scale fisheries peoples (Chuenpagdee 2020; Schreiber et al. 2022). Researchers argue that the SSF Guidelines provide a set of principles that can be used to develop law and policy, and guide decision-making that can help advance Blue Justice for small-scale fisheries (see Jentoft et al. 2022). However, gaps in alignment between the SSF Guidelines and existing legal and policy frameworks may pose challenges for advancement of Blue Justice. Investigating what these gaps are, along with exploring opportunities that may arise, are therefore essential for overcoming these challenges.

This chapter explores the challenges and opportunities for the implementation of the SSF Guidelines in Canada, with a focus on Newfoundland and Labrador (NL), one of four Atlantic Canadian provinces. Laws and policies in Atlantic Canada are comprehensive and have incorporated a range of governance principles for commercial fisheries (Song and Chuenpagdee 2015). Thus far, research by Chuenpagdee et al. (2017) revealed, through a "Step Zero" analysis, that the emphasis in NL has been mostly on establishing organizations and conditions to help improve opportunities for implementation of the SSF Guidelines. There has yet to be a detailed investigation of how the laws and policies align with the SSF Guidelines, and potential trajectories for stronger alignment to advance Blue Justice. SSF Guidelines implementation can foster Blue Justice for small-scale fisheries in a Blue Economy.

In this study, two central research questions guide the analysis of prospects for stronger incorporation of the SSF Guidelines. First, how do the laws and policies align with topics covered in the SSF Guidelines? And second, using insights from the analysis, what are legal opportunities for further alignment to advance Blue Justice? The study is informed by interactive governance theory, explained in Ch.'s 1 and 2. This study addresses principles in the third order and their incorporation in law and policy in the second order, while being informed by context about the first order. As argued by Kooiman and Jentoft (2009), Chuenpagdee (2011), and Song et al. (2013), principles provide guidance for decision-making and thus should be incorporated and advanced in laws and policies.

This chapter begins with the case study description, including the significance of small-scale fisheries in NL, and an overview of the governing context for NL small-scale fisheries. Next, it discusses a rapid appraisal framework to examine laws and policies applying to small-scale fisheries in NL, following Nakamura et al. (2021) (see Methods). The results are presented, outlining the coverage of the SSF Guidelines within the laws and policies. This is followed by

the discussion that addresses key challenges and prospects for strengthening alignment with the SSF Guidelines. The chapter concludes with recommendations for governance and future research to support implementation of the SSF Guidelines for Blue Justice in Atlantic Canada and beyond.

# 3.2 Study Setting

NL is Canada's easternmost province with a population of around half a million (Figure 1). Life in NL revolved around the North Atlantic cod fishery until early 1992 when a series of moratoria on commercial cod fishing were announced in response to severely depleted cod stocks (Schrank 2005). At this time, approximately 40,000 people who relied on fisheries for livelihood, whether from fishing, processing, or ancillary work, saw their jobs disappear overnight. However, in NL fishing continued with shellfish, most notably snow crab and Northern shrimp, replacing groundfish as the most valuable and largest volume landings of any fish species (Windle et al. 2012; Hamilton and Butler 2001). Though the number of fishers steeply declined between 2000-2015 (Sabau and Boksh 2017), fisheries remain a central component of the provincial economy, bringing in over a billion dollars in landed value in 2021 (DFO 2022b).



Figure 1: Map of the Newfoundland and Labrador

Small-scale fisheries in NL are those with the smallest boat length, presently less than 40 feet, and are locally referred to as the small boat fleet (FFA 2020). The small boat fleet is regulated as part of the inshore sector, which is defined through law and policy as vessels less than 65 feet in length. The inshore sector including the small-boat fleet is the largest employer of any fishing sector in NL and contributed over 70% of the landed value in 2021 (DFO 2022b). The values of small-scale fisheries are of particular importance for supporting coastal economies and cultures, and for providing livelihoods for coastal peoples. Small-scale fisheries in Atlantic Canada are

independently owned and operated, and deeply embedded in coastal communities, making them central to the resilience, autonomy, and identity of coastal people (Neis et al. 2014; FFAW-Unifor 2021b). Small-scale fishing fleets in NL face many challenges regarding long-term viability and sustainability, including a decline in the number of harvesters (Sabau and Boksh 2017; Smith et al. 2014), poor recruitment of young people into the industry (Neis et al. 2013), and uncertainty surrounding climate change (Daly et al. 2021).

Governance of NL's commercial fisheries is multilevel, including fisheries protections (e.g., rights and guarantees), supports, and representation for small-scale fisheries existing through laws and policies on the federal and provincial levels. At the federal level, Fisheries and Oceans, Canada (DFO) is the main regulatory body responsible for management of commercial fisheries inside Canada's Exclusive Economic Zone (EEZ) governed under Canada's Fisheries Act (1985) and Oceans Act (1996). Federal laws not specific to fisheries also have the potential to provide key legal safeguards for small-scale fishers. These include human rights legislation such as the Human Rights Act (1977) and the Constitution Act (1982). Federal commercial fisheries policies play a significant role in protecting conservation and sustainability. The Sustainable Fisheries Framework (2009) promotes environmental sustainability by keeping fish stocks healthy, protecting biodiversity, and keeping fisheries productive. Federal licensing policies for Atlantic Canadian provinces were established after the cod moratorium (1996) to outline vessel length restrictions and core status, which defines who can hold federal species licenses based on attachment to the fishery. These policies are intended to promote self-reliance and viability in the inshore fleets (DFO 1996). At the provincial level, Department of Fisheries, Forestry and Agriculture (FFA) regulates the post-harvest and other onshore aspects. Key legislation includes the Professional Fish Harvesters Act (1996), which establishes the Professional Fish Harvesters

Certification Board promoting fishing as a professional occupation, and the Fish Processing Licensing Board Act (2004), for the promotion of regional balance and economic viability in the processing sector.

### 3.3 Methods

This study uses a qualitative rapid appraisal method to explore alignment between the SSF Guidelines and the legal and policy frameworks for NL fisheries. The rapid appraisal follows the Too Big To Ignore Legal and Policy Template (hereafter Legal Template), which guides the systematic and targeted tracking of principles in laws and policies related to small-scale fisheries in NL. This study reviewed 119 laws, policies and documents (for a full list of documents see Appendix I), including fisheries specific laws, such as the Fisheries and Oceans Acts, and laws not specific to fisheries, such as the Canadian Human Rights Act, applicable to small-scale fisheries in NL on both the federal and provincial levels (Table 1). Though provincial legislation is largely geared towards regulation of the post-harvest sector, with some influence also on fishers' harvesting certification, there are extensive linkages between the harvest and postharvest sectors in NL (Neis et al. 2013), making it important to include both federal and provincial legal instruments.

Type of Document	Federal	Provincial
	Documents	Documents
Fisheries laws	6	7
Fisheries policies	19	4
Laws non-specific to fisheries	23	12
Policies non-specific to fisheries	9	6
Programs, strategies, departmental mandates	17	17
Total (119)	72	47

Table 1: Types and number of documents reviewed (Full list of documents Appendix III)

This study determined current and potential alignment of SSF Guidelines in law and policy by assessing the coverage of principles in those law and policies (i.e., presence or absence of principles in laws and policies). Principles were considered as present in laws and policies if they were either explicitly mentioned, reflected in similar language, or implied through related terms. Table 2 presents examples to explain how decisions were made on presence or absence. These examples show how the investigation stayed closely tied to the original language used in the law and policy documents to avoid over-interpretation. After the initial investigation, findings from the Legal Template were categorized into the eight legal issues for small-scale fisheries identified by Nakamura et al. (2021), to show alignment between SSF Guidelines and laws and policies across topics in the SSF Guidelines.

 Table 2: Explanation of presence and absence considerations regarding alignment between

 principles and laws.

Coverage	Explanation of decision-making with examples
1. Covered explicitly - present	There are only a few principles in this category. For example, <i>Transparency</i> and <i>Accountability</i> were both explicitly mentioned by the provincial Transparency and Accountability Act (2004).
2. Covered in similar language - present	This is the most common category. For example, <i>Gender equity and equality</i> was considered present in the Fisheries Act (s. 2.5), where it states the minister

	may consider "the intersection of sex and gender with other identity factors"; <i>Social and economic</i> <i>viability</i> was considered present in the Fisheries Act, where there is mention of "social and economic factors"; <i>Accountability</i> was considered as mentioned under the Species at Risk Act (2002) because of the large focus on governmental responsibility and
	citizen stewardship.
3. Insufficient coverage - absent	This category is also common where some components of the principles were present, but key components absent. For example, <i>Economic, social</i> <i>and environmental sustainability</i> did not sufficiently align with the notion of conservation and heritage in the Species At Risk Act (2002). <i>Equity and equality</i> was absent from the Constitution Act (1982) because it mentioned equality but not equity. <i>Holistic and</i> <i>integrated approaches</i> , which recognizes the ecosystem approach, human well-being and cross- sectoral linkages in fisheries, could not be considered as covered by Canadian laws that reference the ecosystem-based approach (i.e. Fisheries and Oceans Acts). This is because DFO defines "Principles of Ecosystem-Based Fisheries Management" in the Sustainable Fisheries Framework (DFO 2009) as centered on ecosystems, despite the strong argument in scholarship that Ecosystem Based Fisheries Management does rely on human well-being (i.e. De Young et al. 2008, Stephenson et al. 2019). This study relies primarily on the language in law and policy to determine presence and absence, not
4. Indirect coverage/ insufficient data	scholarship. These examples are less common and require in-
– absent	depth understanding of not only the second and third orders, but also first order procedures and practices. Thus, principles cannot be considered present by only looking at the legal perspective (second order). This is true in the case of the Inshore Regulations under the Fisheries Act, which contribute to <i>Human</i> <i>rights and dignity</i> by regulating access to fishing rights for small-scale fishers. However, the language in the law itself is insufficient to consider as present.

# 3.4 Key Findings

# 3.4.1 Coverage of the Principles

The central finding of this study is that there is considerable alignment between principles in the SSF Guidelines and law and policy for NL's small-scale fisheries, especially with the federal laws (see Table 3). This is important because small-scale fisheries are largely federally regulated. Gaps in alignment have also been identified, including lack of a distinct legal category for small-scale fisheries and distinct representation for the small-scale fishing fleet in institutional arrangements.

SSF	Federal Legal Coverage	Federal Legal Coverage
Guidelines	Fisheries Specific	Fisheries Non-Specific
Principles		
		Constitution Act 1982 (Canadian
		Charter of Rights and Freedoms),
		Canadian Bill of Rights 1960,
(1) Human		Canadian Human Rights Act 1977,
rights and		Canadian Multiculturalism Act 1985
dignity		(preamble)
	Fisheries Act 1985 (s. 2.5),	
(2) Respect of	Species at Risk Act 2002	
cultures <sup>4</sup>	(preamble)	
		Constitution Act 1982 (s. 15),
		Canadian Bill of Rights 1960 (s. 1),
		Canadian Multiculturalism Act 1985
		(preamble, s. 5), Canadian Race
(3) Non-		Relations Foundation Act 1991
discrimination		(preamble, s. 4)
(4) Gender	Fisheries Act 1985 (s. 2.5)	Constitution Act 1982 (s. 15, 28),
equity and		Canadian Bill of Rights 1960 (s. 1),
equality		Canadian Human Rights Act 1977 (s.

Table 3: Coverage of the SSF Guidelines by federal laws relevant to NL small-scale fisheries

<sup>&</sup>lt;sup>4</sup> Respect of cultures, in this instance, refers to settler coastal cultures. A legal analysis for Indigenous communities, which is also vital, requires analysis of Canadian and Indigenous legal frameworks.

<b>F</b>		
		2, 3, 11), Employment Equity Act
		1995 (s. 2, 5, 8, 9, 10, 18, 25 referred
		under designated groups)
(5) Equity and		Sustainable Development Act 2008 (s.
equality		5), Employment Equity Act 1995
(6)	Fisheries Act 1985 (s. 2.5),	Canadian Race Relations Foundation
Consultation	Oceans Act 1996 (s. 32, 33, 50),	Act 1991 (s. 6), Sustainable
and	Species at Risk Act 2002	Development Act 2008 (s. 5),
participation	(preamble, s. 10-12)	Employment Equity Act 1995 (s. 15)
	Oceans Act 1996 (s. 11, s. 33),	Constitution Act 1982 (Canadian
	Species at Risk Act 2002	Charter of Rights and Freedoms),
	(preamble, s. 54), Coastal	Fisheries Act 1985 (s.5)
	Fisheries Protection Act 1985	
(7) Rule of	(s.6), Canada Shipping Act 2001	
law	(s. 10, 19)	
		Sustainable Development Act 2008 (s.
(8)		5), Federal Accountability Act 2006
Transparency		(Part 3)
	Species at Risk Act 2002	Sustainable Development Act 2008 (s.
(9)	(preamble, s. 7, 8)	5), Federal Accountability Act 2006
Accountability		(Part 4)
(10)	Fisheries Act 1985 (s. 2.5),	Federal Sustainable Development Act
Economic,	Oceans Act (preamble, s. 30, 35,	2008
social and	40)	
environmental		
sustainability		
(11) Holistic	Species at Risk Act 2002	
and integrated	(preamble, s. 41, 67)	
approaches	(pressioner, st. 11, 07)	
(12) Social	Species at Risk Act 2002 (s. 10,	Federal Sustainable Development Act
responsibility	11, 12)	2008 (s. 5)
	Fisheries Act 1985 (s. 2.5),	Federal Sustainable Development Act
	Oceans Act 1996 (preamble, s.	2008 (s. 5)
	4), Species at Risk Act 2002	
	(preamble, s. 49, 55), Coastal	
(13) Social	Fisheries Protection Act 1985	
and economic	(purpose), Canada Shipping Act	
viability	2001 (objectives)	
viaonity	2001 (00]0011003)	

As Table 3 shows, certain principles are well-covered by fisheries laws, such as *Economic*, *social and environmental sustainability* and *Social and economic viability*, while others are covered by Canadian legislation not specific to fisheries, such as *Human rights and dignity*.

Some principles, notably *Gender equity and equality*, have coverage in general and specific laws, but are not necessarily well-defined and secured by these instruments. This is the case where gender is mentioned in the Fisheries Act under "considerations."

In addition to fisheries laws, fisheries policies play important roles in outlining what government intends to achieve (or avoid doing) and how principles in law are to be implemented (Prabhat 2011). Policies incorporate principles in law and guide decision-making by identifying opportunities and challenges, outlining strategies and priorities, and offering actions, mechanisms and programs which can be monitored and reviewed (FAO 2022). Thus, policies are a good indication of how a government incorporates principles, whether codified law or not.

Two principles were present overwhelmingly in fisheries policies. These were *Economic, social and environmental sustainability* and *Social and economic viability*. While *Equity and equality* was absent from federal fisheries policies, as published,<sup>5</sup> it was present in provincial policies surrounding the Fish Processing Licensing Board Act. Principles were often mentioned across laws and policies with little indication of how principles connect to small-scale fisheries.

<sup>&</sup>lt;sup>5</sup> The New Access Framework disappeared from published policies on DFO's website in the Spring of 2022. Equity was mentioned by this policy regarding considerations for emerging access.

## 3.4.2 Coverage of the Legal Categories

# 3.4.2.1 Legal definition

The small-scale fleet (vessels <40 feet or 12.192 meters) is recognized by several laws, regulations and policies that address the inshore fishing sector, and include different protections for small-scale fisheries as part of the inshore sector. The Fisheries Act (s. 2.5) recognizes the inshore fleet as a decision-making consideration. The Act states that the Minister may consider "the preservation or promotion of the independence of license holders in commercial inshore fisheries." In the Atlantic Fisheries Regulations Part III (regulations under the Fisheries Act), the "Inshore Regulations" define inshore licenses as owner-operated. This means that license holders retain 100% of the "voting shares," or total sovereignty, of the fishing enterprise and that the fisher operating the vessel must also be the owner of the vessel and license holder. These regulations aim to protect the inshore fisheries from corporate ownership and spread benefits among fishing people in local communities. The inshore fisheries regulations are potentially consistent with Equity and Equality (Principle 5) and Social and economic viability (Principle 13) (Canada Gazette 2020). These regulations also define fishing area subdivisions and close times according to gear type, with some indication of vessel length/fleet. However, the regulations include only two references to NL's small-scale fleet. For instance, in the Atlantic Fisheries Regulations under crab fishing areas, there are no references to NL's small-scale fleet, while DFO indicates through management plans that NL's small-scale fleet has distinct fishing area subdivisions (DFO 2022c). The Fisheries Licensing Policy for NL (1996) defines the fishing fleets with the smallest boat fleet as including vessels <40 feet in length.

## 3.4.2.2 Tenure and labor issues

Tenure in NL is held through arrangements that protect fishers' access such as professionalization and core status, as well as social and employment benefits for small-scale fishing people. Small-scale fishers' registration with core status protects them as primary beneficiaries of fishery resources. Small-scale fishers are the "primary beneficiaries" of resources by being self-employed and autonomous individuals who are granted priority access to catch and to offload fish (to buyers of their choice). Additionally, core status grants fishers with privileges regarding access in the case of shrinking quotas or ecological, economic, social and political changes. This was the case during the cod moratoria when those with core status were given access to new licenses and expanding quotas, while others were pushed out of the fishery or kept to more stringent limitations (Clarke 2003). Social and employment benefits for smallscale fishing people include Employment Insurance (Fishing) under the Employment Insurance Act of 1996 providing self-employed and seasonal workers with financial support when harvest or income falls under a given threshold. Tenure can also be held through protected fishing areas, of which there is limited use in NL. The Atlantic Fisheries Regulations outlines protected areas based on gear type and the Eastport Marine Protected Area policy outlines a no-take zone for lobsters in the Eastport region, protecting small-scale harvesters near that port.

### 3.4.2.3 Participation in fisheries management and conservation

Participation in the management of fisheries is legally recognized in the Fisheries Act and Oceans Act, which state the importance of collaboration with fishers and other local stakeholders in decision-making concerning the management and protection of fisheries (Fisheries Act) and coastal and marine ecosystems and territories (Oceans Act). While not mandatory, the Fisheries Act states that the Minister "may consider" community knowledge in decision-making (s. 2.5). Presently, NL fishers participate through the fisheries union, FFAW-Unifor. Fishers participate in regional and fleet-based advisory committees, with input on decisions about quota and seasonality. Working groups and advisory committees are used by the Canadian Science Advisory Secretariat (CSAS) and the Sustainable Fisheries Framework for science advice and fisheries monitoring in integrated fisheries management. An understanding of participation may be limited from a legal and policy perspective without insights into how participation is practiced. For instance, there is no legal mandate requiring that DFO incorporate the advice and input of fishers, and so examples from fishers' experiences can help determine to what extent fisher knowledge is considered in decision-making.
Legal/ Policy	Relevance
Document	
Fisheries Act (s. 61)	Outlines fishers' representation in DFO science through
	mandatory logbooks. CSAS interprets this data for scientific
	advisory reports to aid DFO decision-making.
Fisheries Act (s. 86.95)	Outlines sharing of costs for monitoring and compliance between
	fishers and DFO.
Framework and	Fishers participate in decision-making through advisory councils.
Guidelines for	This is outlined in Integrated Fisheries Management Plans for each
Implementing the Co-	species and area. Planning involves collaboration with
Management Approach	stakeholders, including through fisher advisory councils.
(1999) Volume I-III	

Table 4: Participation of small-scale fishers in management and conservation

3.4.2.4 Partial, exclusive zones and/or preferential access

In NL, small-scale fishers have preferential access to territories within 20-30 miles of their homeport, as described in fishers' licensing conditions. Preferential access is in accordance with the adjacency principle, which states that those closest to the resource should benefit (Foley and Mather 2019). Fishing areas are organized by Northwest Atlantic Fisheries Organization (NAFO). For crab fisheries, for instance, there are divisions of NAFO areas based on fleet and homeport called "Crab Management Areas" with exclusive access to closer territories for <40 ft vessels, as outlined in the Atlantic Fisheries Regulations and Commercial Fisheries Policy for NL (See Integrated Fisheries Management Plan, Snow Crab, NL Region: Appendix 6). Also outlined in the Atlantic Fisheries Regulations (s. 90) are zones excluding use of trap nets (cod traps), long lines and/or gill nets for periods of the year. Petty Harbour-Maddox Cove is the only community still using this provision (Martin 1996), which is exclusively for the use of handlines.

In Eastport, locals have established an exclusive access zone via the establishment of a marine protected area, as outlined by the Eastport Marine Protected Area policy.

3.4.2.5 Public financial mechanisms

Fishers' main support is through the Employment Insurance (Fishing) under the Employment Insurance Act (1996) and infrastructure supports through the Fisheries Restructuring Act (1983) and the Recreational Harbours Act (1985). In NL, fishers can apply for federal funding through DFO, regulated by the Fisheries Act, to enhance or upgrade their operations to keep them viable through uncertain times. Specific programs include the Fish Harvester Benefit and Grant Program, Canadian Seafood Stabilization Fund, Sustainable Fisheries Solutions and Retrieval Support Contribution Program, Sustainable Fish and Seafood, Canadian Fisher and Seafood Opportunities Fund, and the Atlantic Fisheries Fund (DFO 2021f).

3.4.2.6 Gender laws and policies

Regarding gender, the Fisheries Act states that when making a decision, the Minister may consider "the intersection of sex and gender with other identity factors" (s. 2.5). Legislation non-specific to fisheries includes the federal Employment Equity Act (1995), requiring equal treatment and that "special measures" are made to accommodate disparities. For instance, businesses might ensure equitable representation on boards where there are pre-existing gaps. Also, Article 11 of the Canadian Human Rights Act (1985), refers to "equal wages" effectively banning wage discrimination based on gender (c. H-6). The Canadian Charter of Rights and Freedoms (1982), under Equality Rights (s. 15), also recognizes equality before the law. The

Canadian Bill of Rights 1960 (s. 1) addresses discrimination based on sex. There is also the federal Policy on Gender-Based Analysis Plus (GBA+): Applying an Intersectional Approach to Foster Inclusion and Address Inequities, under Justice Canada. This is a 'whole of government' policy that extends across sectors, jurisdictions, and departments to identify how laws, policies, and employment practices contribute to inequities across multiple identity factors including gender and sex. DFO has a mandate for GBA+ in understanding how fisheries and oceans sectors can become inclusive (DFO 2019c). Some specific measures have been outlined by this policy including workplace training in the Coast Guard and incorporating gender and equity considerations into policy and decision-making. Nonetheless it is unclear how DFO will proceed with this initiative regarding the fisheries, generally, and in the context of Canada's Blue Economy strategy. Provincially, the Human Rights Act (2010) prohibits discrimination based on "sex, sexual orientation, gender identity, [and] gender expression" and recognizes that each person is equal regardless of these characteristics (c. H-13.1).

#### 3.4.2.7 Climate change instruments and mechanisms

Environment and Climate Change Canada is the federal department responsible for creating and enforcing the Canadian Environmental Protection Act and supporting policies including the Pan-Canadian Framework for Clean Growth and Climate Change. Provincial policies include the Framework for Incorporating Climate Change into Public Infrastructure Planning, which addresses climate-change oriented infrastructure development with interdisciplinary perspectives, and The Way Forward, which addresses climate action strategies, detailing key mechanisms for decreased waste from fishing, decreased fuel consumption, and increased use of local and scientific knowledge.

3.4.2.8 Fisher representation in institutional arrangements

Fishers in the inshore fleet are represented through a co-management system, interpreted as partnering with legitimate fisheries organizations, such as FFAW-Unifor, and sharing data and costs of fisheries management with the government. Forms of representation as outlined by laws and policies are described in Table 5. Specifically, there may be procedural uncertainty on the extent to which the small-scale fishing group is represented in decision-making considering all inshore <65 ft interests are represented together in the union, along with interests of workers in the processing sector. Provincial legislation also recognizes the role of fishers in decision-making under the Collective Bargaining Act (1970), with the establishment of the provincial Price Setting Panel (2006), which intends to promote fair prices for fishers and processors and a timely start to the fishing season. This representation is not based on fleet, and thus not distinct to the small-scale fisheries.

Legal/ Policy	Relevance
Document	
A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast (2004)	Interprets co-management as "the sharing of responsibility and accountability for results between Fisheries and Oceans Canada and resource users, and in time and with the required legislative amendments, the sharing of authority for fisheries management." For now, fishers are represented in decision-making through FFAW-Unifor, with no final decision-making power on the part of fishers or the union.
Professional Fish Harvesters Act	Established Professional Fish Harvesters Certification Board, where fishers are represented through collective bargaining representatives (7), registered fisheries co-operative representative (1), alongside provincial government (2), academic (1), federal government (2), aboriginal (1), and a minister's chosen appointee.
Fishing Industry Collective Bargaining Act of 1970 (s. 19.1)	Fishers negotiate prices with processors. Negotiations are mediated by a third party referred to as the Price Setting Panel, according to amendments passed in 2006 as recommended by the Cashin Report. The Panel is composed of three members appointed by the Lieutenant Governor in Council who determine prices after bargaining occurs between agents from processors and fishers.

Table 5: Representation of small-scale fishing people in institutional arrangements

#### **3.5 Discussion**

Overall, laws and policies applying to NL small-scale fisheries show ample coverage of the principles in the SSF Guidelines, although with lack of clarity about the implications of this coverage in first-order procedures and practices. The analysis of eight legal issues also highlighted key gaps related to small-scale fisheries protections and secure access. Gaps pointed to the need for distinct legal definition for small-scale fisheries, secure access and tenure, and adequate representation of small-scale fisheries people in institutional arrangements. Identifying ways to advance alignment between second and third orders, for principles including *Holistic and integrated approaches* (Principle 12), *Equity and equality* (Principle 5), *Consultation and* 

*participation* (Principle 6), and *Gender equity and equality* (Principle 4) is important for Blue Justice, particularly when considering the growth of, and attention towards, other ocean industries, as outlined by Canada's Blue Economy Engagement Paper (DFO 2021a). With these challenges in mind, there is urgency to identify ways to strengthen legal and policy alignment with key principles for small-scale fisheries secure rights to continued access to ocean resources.

#### 3.5.1 Legal Recognition

Legal recognition, according to Nakamura et al. (2021), is vital to empowering small-scale fishers and affirming their rights. In the case of NL small-scale fisheries, there are weaknesses in this area. First, small-scale fisheries' representation is not distinct, but legally embedded in the inshore fleet, according to the Fisheries Act. This means that legal protections for the small-scale fleet may be insufficient. Further, while professionalization fulfills the need to recognize small-scale fishers as professional, not all small-scale fishing activities are recognized. There is evidence that core status, tightly linked to professionalization, has resulted in increased barriers for those fishing on the smallest scale. For instance, fishers using handlines were excluded from gaining access to new licenses or passing down their own licenses when the professionalization law was instated after the moratorium (Clarke 2003). The fact that full time fishers using handlines were not recognized as professional contradicts with Section 6.5 of the SSF Guidelines, which stipulates that "the full range of activities [...] part-time, occasional and/ or for subsistence" should be recognized as professional.

64

#### 3.5.2 Recognition along the Value Chain

Even without distinct legal recognition, protections can be improved through better coherence between governance of harvest and post-harvest sectors for integration of key principles, notably Holistic and integrated approaches. Separate jurisdictions between federal and provincial laws for the harvest and post-harvest sectors make it challenging to achieve "policy coherence, institutional collaboration and coordination," as outlined in Section 10 of the SSF Guidelines. One example outcome of the limited incorporation of Holistic and integrated approaches is that provincial governmental decisions allowed for mergers and acquisitions in the processing sector, creating corporate concentration. A powerful and corporatized processing sector, dominated by the foreign and vertically integrated company Royal Greenland, has the potential to endanger small-scale fishing rights and access (Andrews et al. 2022). Further, corporate concentration in NL's processing sector eliminates competition among buyers, posing threats to a fair price for small-scale fish products, and thus undermining Social and economic viability. Under-recognized ties between processors and fish harvesters have created a wicked problem in Canadian fisheries governance (Song et al. 2018), threatening owner-operator protections and equity for small-scale fisheries people (Frost 2021). Developing legal protections for small-scale and inshore fisheries, with a coordinated law and policy along local value chains, is imperative for supporting fisheries livelihoods. Fishing co-operatives, such as the one on Fogo Island, which has vastly improved market opportunities and benefits for Fogo Island fishers (Thomas et al. 2014), in line with Section 7.3 of the SSF Guidelines, serve as examples of viable alternatives to a corporatized processing structure.

#### 3.5.3 Tenure and Preferential/ Exclusive Zones

Lack of legal protections for small-scale fishers extends to the absence of tenure with no right to livelihood for small-scale fisheries people. The lack of small-scale fishers' rights to access resources is in direct contradiction with Section 5.3 of the SSF Guidelines, which recommends secure tenure rights. Instead, fishing access is framed as a privilege, to be given by the federal government, and can be withdrawn at any time. One of the most important aspects of tenure for small-scale fishers involves implementation of preferential and/or exclusive zones. There are two instances—exceptions rather than the norm—regarding communities which were able to establish protected fishing areas based on locality and gear type. First, fishers of Petty Harbour-Maddox Cove established their own protected fishing area for handlines, due to a strong local ethic of conservation and protection of traditional fishing methods (Bryant and Martin 1996). Second, with the help of influential leaders, the Eastport communities worked with the government to establish the MPA (Davis et al. 2006). Without protected access based on gear type for most of NL, fishers using handlines, the smallest scale of fishing, must compete for ocean space alongside fishers using gillnets and longlines. Creating protected areas for handlining, trap fishing and small-scale gear types which support fishing communities and ecological integrity can bridge alignment between law and policy, the SSF Guidelines, as well as other international obligations including Canada's commitment to the United Nations Marine Conservation Targets (DFO 2021d, 2021e; Lemieux et al. 2019).

Presently, it is unclear whether the area allocated to the small-scale fleet is sufficient for longterm self-reliance and economic viability with no legal parameters guaranteeing that small-scale

66

fishers will have enough ocean space and quota to survive. The small-scale fleet has the largest number of enterprises (Sabau and Boksh 2017) and yet the smallest overall fishing area and the least number of quotas per enterprise. Table 6 describes allocations for the Crab Management Area 3LNO in NL (DFO 2019b, 2022b, 2022c) with stark inequities between the small-scale, inshore, and offshore fleets.

Table 6: Quotas distribution in NL Crab Management Area 3LNO (2018), based on Integrated Fisheries Management Plan, Snow Crab, NL Region (crab management areas shown in map in Appendix 6)

Fleet	Fishing Areas	Quota (tonnes) (2018)	# Licenses	Averages tonnes per license
Small-scale <40 feet	5A, 6A, 6B, 6C, 8A, 9A	4,420	627	7
Inshore fleet 40-65 feet	8B, NS, MS	7,323	203	36
Offshore >65 feet	MS, MS/ ex, 3L/EX, 3L 200, 3N 200, 3NO 200	6,839	37	185

Encroachment on small-scale fisheries' tenure and access to ocean space also occurs from other ocean industries, including emerging industries such as large-scale aquaculture and long-standing industries like oil and gas. This encroachment points to a gap in alignment with Sections 5.9 and 5.10 of the SSF Guidelines asserting that small-scale fishing communities are not arbitrarily evicted in competition with other industries, and that small-scale fishers are consulted prior to implementation of large-scale projects. Examples in NL show that these sections of the SSF Guidelines require attention, where industrial salmon farms are built and

operated in small boat fishing harbours. Despite compliance with environmental protection standards as outlined by the Fisheries Act, such operations have highly uncertain consequences for surrounding small-scale fisheries (Wiber et al. 2021). Oil and gas industry also pose pressures, with research showing that the industry in other Atlantic Canadian provinces has been powerful in swaying conservation decision-making, pointing to inequitable representation among sectors and threats to coastal ecosystems on which small-scale fisheries rely (Kapoor et al. 2021; Watson and Hewson 2018). In NL, this was also the case on the Northeast Newfoundland Slope, where oil companies have been able to conduct seismic testing in marine refuges from which fisheries are banned (CBC News April 2018). With high costs of licenses, limited quota allocations and lack of preferential access in the form of protected fishing areas, small-scale fisheries' face ample challenges.

#### 3.5.4 Fisher Representation and Participation

Fisher representation is vital so that fishers are involved in the decisions that affect their livelihoods (Bavinck et al. 2018). While FFAW-Unifor has been crucial for inshore fishers' representation—and will presumably continue to be—other approaches to representation may be needed to understand the distinctiveness of small-scale fishing needs. Recently, widespread use of social media has increased flow of information among fishers, as well as between fishers and government, contributing to enhanced opportunities for participation and decision-making. In March 2022, DFO held online consultations on issues concerning boat length, which provided fishers the opportunity for direct input into decision-making (Dean-Simmons 2022). Such interactions can be promoted as they encourage direct fishers' involvement and inclusion of the small boat fleet in alignment with Section 12 of the SSF Guidelines.

#### 3.5.5 Role of Women

Recognizing the role of women in small-scale fisheries is an opportunity to advance alignment between the laws and policies and tenure and legal protections, particularly when considering the forthcoming Blue Economy strategy. While there is strong legal basis for *Gender equity and equality* in laws not specific to fisheries, DFO is seeking ways to implement this principle in fisheries and coastal spaces (DFO 2019c). In this case, inclusion of *Gender equity and equality* in fisheries law and policy speaks not only to the viability and sustainability of the small-scale fisheries (Neis et al. 2013), but also prioritization of small-scale fisheries in the ocean space and along local chains. Women play central roles in NL's small-scale sectors, especially in recruitment and labor (Neis et al. 2013). Support for large-scale male-dominated sectors over small-scale sectors with high participation from women could hinder implementation of the SSF Guidelines and thwart the enaction of principles mentioned by the Fisheries Act, including consideration of gender in decision making.

#### 3.5.6 Climate Change Mitigation and Adaptation

Overall, lack of small-scale fisheries' distinct legal representation, as is the case in the Fisheries Act, affects the extent to which fishers can be centrally involved in climate change planning, action, and mitigation and adaptation. This is relevant for all types of planning, including conservation and management. However, regarding climate change, Section 9 of the SSF Guidelines stipulates "urgent and ambitious action" of which small-scale fishers must be the drivers. In other words, small-scale fishers need to play a central role in climate change decisionmaking contexts because they are, and will be, greatly impacted by climate change, now and in the future (Rahman et al. 2021; Cook et al. 2021). However, DFO's scope of solutions for dealing with climate change have involved limited participation from fishing people (Daly et al. 2021; Mechler et al. 2019). Climate change strategies which DFO has employed in the past, according to Daly et al. (2021), including MPAs and the precautionary approach, have prioritized ecosystem considerations over human well-being and fisher perspectives (Lemieux et al. 2019; Arkema et al. 2006). Without sufficient consideration of the impacts these climate change solutions have for small-scale fisheries, for example in the formation and establishment of MPAs, small-scale fishing tenure is put at risk (Bennett et al. 2020). Legal mechanisms need to find ways to integrate small-scale fishing voices for several reasons, including climate change mitigation and adaptation, governance adaptability and responsiveness, governance complexity, and increased knowledge and learning.

## **3.6 Towards Blue Justice**

Study 1 identifies key challenges and opportunities in the implementation of the SSF Guidelines in NL based on a document review. Study 1 finds that fisheries related laws and policies have ample legal coverage. Yet, there is room for improvement. First, there needs to be language showing how principles in laws and policies, for instance consideration of gender, support smallscale fisheries. Second, small-scale fisheries require distinct legal recognition outside recognition with the inshore fleet. This is because they have more restrictions, different gears (in some cases), and less fishing area and quota. Third, categories like professionalization and core status may need to be expanded to account for the diverse types of gears and fishing methods within the small-scale fleet, so that even those fishing on the smallest scale can have secure access. Fourth, there needs to be increased coordination between harvest and post-harvest governance with support for fisher-owned and small-scale processing for better integration of viability and *Holistic and integrated approaches*. Fifth, increased understanding of how tenure rights can be promoted through exclusive preferential zones can advance equity and adjacency for small-scale fisheries. And finally, as other sectors gain recognition, access and power in the ocean space, it will be vital to ensure that small-scale fishers do not lose in terms of their own access and sustainability. Further identifying opportunities to create just and equitable institutional settings requires moving beyond this legal analysis to speak with fishers themselves. However, Study 1 is an essential first component.

# Chapter 4: Fishers' Perspectives on the Small-Scale Fisheries Guidelines in Newfoundland and Labrador

This chapter explores challenges and opportunities to implementation of the SSF Guidelines in Newfoundland and Labrador (NL), Canada, from the perspective of small-scale and inshore fishers. Implementation of the SSF Guidelines into laws and policies is key for advancing Blue Justice. While the legal perspective is important for identifying alignment and key gaps between laws and policies and the SSF Guidelines (as shown in Chapter 3), it is important to explore how principles from the SSF Guidelines are implemented and practiced on the ground through fisher perspectives. Through their own firsthand experience, small-scale fishers can inform how principles are practiced and operationalized, beyond what can be learned from reviewing documents. Considering that the recent consultation and engagement papers for Canada's Blue Economy strategy have an explicit focus on inclusivity (DFO 2021a, 2022a), seeking fishers' perspectives is crucial to development of this plan. Thus, there is widespread need to speak with fishing people so that laws and policies can better account for lived experiences, to integrate fisher knowledge into planning and policy for the future.

Study 2, the empirical portion of this research, involved 38 semi-structured interviews with small-scale and inshore fishers to elicit their perspectives on their experiences about principles in the SSF Guidelines, specifically which principles require attention and why. Data collection and analysis for Study 2 were guided by three research questions. First, which principles require the most action and attention according to fishers? This question is important for creating the list of priorities for present and future planning which can bring NL closer to implementation of the 13

principles. Second, what are NL fishers' experiences surrounding the 13 principles? The SSF Guidelines principles may not take on the same meaning in every context because they are broad and malleable terms. Thus, it is necessary to ground the SSF Guidelines principles in the daily lives of fishing people in NL if they are going to be implemented in this context. And third, how much agreement or disagreement about which principles are implemented well/ poorly is there within fisher groups? This question helps identify diversity among fisher perspectives and priorities and the potential reasons behind the differences, for instance vessel class, or geographic region.

#### 4.1 Study Site and Method

Interviews were conducted in three regions—the Burin, Bonavista and Avalon Peninsulas (Figure 1), during the Winter of 2021-2022. The regions have active small-scale fisheries and have some geographic distinctiveness. In the case of the Burin and Bonavista Peninsulas, they are made up of dispersed fishing towns with no major urban centers and high percentages of people employed by fishing (11% and 8% respectively, FFA 2010). The regions only have one access road and few main roads and are relatively isolated especially in winter. Burin and Bonavista span two different fishing zones, each with different openers and closures for fishing seasons. The Northeast coast is impacted by ice conditions typical from January-May (Barber et al. 2018), while the southern region faces distinct pressures from aquaculture and external fishing fleets explained further in this chapter. These distinctions can reveal regional-specific challenges associated with the fisheries and the implementation of the SSF Guidelines. The Avalon Peninsula has the largest fishing population of the three regions, the largest area

geographically, an airport, many roads, and the provincial capital city of St. John's (FFA 2010). Within these regions, participants were from 18 towns.



Figure 1: Map of the case study region

There were 46 total respondents, with eight interviews not included for reasons explained below. Of the 38 interviews which were included (Table 1), 36 were conducted in person and only two were done over the phone. Thirty-six were with male fishers and two with women (no explicit efforts were made to speak with either men or women). The majority of the interviews (n=33) were with owner-operators/ captains, as preferred by many crew members, but five of the crew members were willing to do the interview. All interviews were designed to occur with individuals on a one-to-one basis, but in 12 occasions, another person was present during the

interview and sometimes offered opinion. However, it was the perspective of the participants that the data captured. Level of formal education ranged from no high school diploma to university degrees. Many fishers interviewed were involved in community organizations, fishing cooperatives, harbour authorities, and regional crab and cod committees, some participating in DFO science and surveys, giving them unique perspectives on and experiences surrounding governance. Table 1 shows the number of participants in each region and by vessel length. These groups formed the basis for part of the analysis, which occurred based on fleet and region.

Table 1:	Numb	er of pai	ticipants	based	on vessel	l length/fleet an	d region
		p					

Region	Participants, small boat fleet (<40 feet)	Participants, inshore fleet (40-65 feet)	Total participants
Avalon	6	0	6
Burin	8	6	14
Bonavista	9	9	18
Total	23	15	38

## 4.1.1 Participant Recruitment

The research employed convenience and snowball sampling with the goal of including a range of diverse perspectives and communities. Snowball sampling occurred by asking one participant for the name of the next participant and where to find that person. Participants were found in person and not over phone/ internet, though some were contacted by phone after they consented to being contacted in that way. Townspeople not directly involved in the fishery were helpful in providing the names of fishers who they considered leaders/experts. I approached potential participants on the wharf, at fishers' homes/ workshops, or by knocking on doors of houses with fishing gear or fishing boats in the yards. I explained I am doing Master's research at Memorial University in a

project seeking to bring attention to the benefits of the small-scale fisheries. I then asked if the person had availability to answer a few questions, which would take about 30 minutes to an hour.

#### 4.1.2 Research Instrument

Interviews were semi-structured using a pile sorting technique to elicit fisher perspectives, similar to Song and Chuenpagdee (2015), as shown in Figure 2. Semi-structured interviews incorporate open-ended questions and offer room for flexibility in the interview structure (Galleta 2013). The interviews began with general questions, then moved to specific questions about the principles, and ended with one broad question at the close. Semi-structured interviews left room for complexity, context, color, light and narrative in our conversations, so that I could relate the 13 principles to fishers' experiences.

I then used an innovation from Song and Chuenpagdee (2015) called pile plus sorting. The sorting technique incorporates quantitative and qualitative data and analysis. The sorting activity relied on the participant placing physical cards onto a colorful board. Thus, it provided a visual, hands-on, and accessible component of semi-structured interviews to discuss the 13 principles, which were often unfamiliar to the participants. Participants are asked to place the 13 cards, containing principles from the SSF Guidelines with short definitions on the back, on the sorting board to indicate the priority (see Appendix I for more details). It could be conducted in a variety of settings, including on fishing vessels, vehicles, wharves, and fishers' homes and gear workshops. The sorting activity stimulated passionate responses and provided a pathway for learning about what the principles meant for participants in relationship to their experiences.

76

The position of the cards can be interpreted as follows:

Center (1) = implemented well, considered low priority Middle (2) = needs some work, considered middle priority Outer ring (3) = needs a lot of work, action and attention, considered high priority In a few instances, participants placed the card to the side to indicate their neutral position or that they were unsure. These cards were also given a score of zero, explained below. "Priorities" was not a word used in the interviews. However, by showing which principles require the most action and attention, the participants revealed a set of priorities for the purposes of this research. Principles which need a lot of work are considered high priority because they represent pathways which can move towards implementation of the SSF Guidelines. In sum, the word "priorities" links participant responses to the aims of this research, which include identifying some key pathways towards implementation of principles in the SSF Guidelines.



Figure 2 Example Sorting Board. Participant 19, inshore fisher from the Burin Peninsula

The following instructions were provided to participants:

There is a document called the Small-Scale Fisheries Guidelines, which brings attention to the contributions of the small-scale fisheries. Canada has recently recognized this document but made no indication of how they're going to implement it, so that is what we are trying to figure out. In the document, there are 13 principles. Each of these is represented by a card with a short definition on the back. On the board are three categories. In the center (purple), goes any card which, according to your opinion, is sufficiently implemented, as is. In the middle (green ring), goes any card which needs some work. And on the outside, goes any card which needs a lot of work, action and attention to get where we need to go. Feel free to place any card to the side if you feel unsure or neutral. As you sort the principles, please explain why you are making that choice.

I then shuffled the cards, placed them on the table, and let the sorting occur. I mostly listened, with a few questions such as, "Why do you think that is?" I recorded responses in a notebook and took a photo of the board at the end of each sort. With participants' consent, interviews were audio recorded and transcribed. In the case that participants did not consent to audio recording, I took detailed notes of their responses.

Each sorting choice was represented by a value (high priority=3, middle priority=2, low priority=1, neutral=0). The scores were aggregated by group of fishers, based on region or fleet, and normalized to 100. Over all respondents, the sorting activity had fairly even distribution between the three categories, with approximately one-third of all answers in center, middle and outer rings.

Eight interviews were not included because participants were not from the three regions, were not part of the small boat or inshore fleets, were not fishing people, or refused to sort the principles according to the instructions. Participants were divided into groups based on fleet and region to help determine differences in perspective between the small-scale and larger boat fleet or between different regions facing varying sets of issues. Groups used for the analysis, as shown by Table 1, included Fisher All, Bonavista All, Burin All, Avalon All, Burin <40 ft, Burin 40-65 ft, Bonavista <40 ft, Bonavista 40-65 ft, and Avalon <40 ft (there were no participants in the Avalon 40-65 ft).

For analysis, I used Kendall Tau rank correlation analysis. This is a non-parametric statistical analysis appropriate for this study because of its usefulness in small sample sizes (Luomba et al. 2016; Gearhart et al. 2013). Kendal Tau was used to measure the degree of similarity within groups (not *between* groups). Thus, the analysis tests the hypothesis that respondents can be considered as a group, based on similar enough responses, using the chi-square method.

Synchrony and Internal Rate of Return packages in R language from RStudio software were used to compute Kendall coefficients with all tests corrected for ties (Watts and Stenner 2012). In seven out of ten cases, there was a confidence level of .95 or higher. For the Burin inshore fleet there was a confidence level of .9. The Bonavista small boat fleet and Avalon group each had no correlation (with p-values closer to .5 than zero). Qualitative analysis occurred through transcription and coding according to each of the 13 principles and fisher responses on the sorting board, to determine the justification for fisher responses and elicit examples which help explain and contextualize the results.

#### 4.2 Key Quantitative Findings (Correlation and Ranking)

In eight of the ten groups (all except the Avalon and Bonavista <40-foot fleet), Kendall's Tau measure of correlation indicated significant association/ similarity in responses, however there was also dissimilarity among perspectives. Reasons for dissimilarity included differences in perspectives, experiences, and opinions. The Avalon region lacked any significant correlation among respondents in the group. This was not unexpected considering there are only six participants from this region, representing a large and diverse population of over 5,000 fishers (FFA 2010). The Bonavista small boat fleet also lacked significant correlation due to the high diversity of responses within this group. Some small boat fishers were extremely dissatisfied with the overall governing system (sorting most principles into high priority) and others were extremely satisfied (sorting most into low priority). Part of what this shows is that even within the small boat fleet, there are many different perspectives, sometimes in direct conflict.

Drawbacks to this method included fishers having varying interpretations of the principles making it at times difficult to compare across sorts. For instance, those interpreting *Accountability* as fishers' accountability (e.g., fisher accountability for following laws, supporting conservation, and participating in meetings) generally sorted it into the low priority category, while those interpreting it as governmental accountability (e.g., government accountability for protecting small-scale fisheries relative to large scale-fisheries, protecting coastal environments from seismic testing and industrial aquaculture, and investing in rural communities as much as urban centers) often chose to sort it as high priority. In some instances, fishers answered the question: "how are fishers/ communities implementing this principle from the bottom-up?" In others, they answered, "how is the government implementing this principle from the top-down?" Both questions represent essential components of governance, which is why I did not specify during the interviews how fishers should answer. It was crucial to let fishers share their own interpretations to better adapt the SSF Guidelines to the NL context.

Following is an explanation of the quantitative data, with Tables 2-4 showing the normalized scores and ranking, which is shown in parentheses, for each of the participant groupings. The results of all respondents are shown in the first column of each table for baseline reference. As can be seen from Table 2, while fleet groups are largely in agreement, there were significant differences for certain principles, notably *Economic, social and environmental sustainability*, with the small boat fleet ranking it as third highest priority and the 40-65 ft group as tenth highest priority. Table 3 shows that *Consultation and participation* was ranked as high priority among all the regions, except on the Burin Peninsula where it was ranked sixth highest priority. Conversely, *Economic, social and environmental sustainability* was generally thought of as well-

81

implemented (low priority), except on the Avalon where it was ranked as highest priority. Table 5 shows that *Non-discrimination*, ranked fourth highest priority overall, was the highest priority among the Burin small-scale fleet, while *Transparency*, ranked as highest priority overall was ninth highest priority for the Burin small-scale fleet.

Principle	All (38)	<40 ft (23)	40-65 ft (15)
Consultation and participation	75 (1)	75 (1)	76 (2)
Transparency	75 (1)	75 (1)	76 (2)
Equity and equality	72 (3)	68 (5)	78 (1)
Human rights and dignity	71 (4)	68 (5)	76 (2)
Non-discrimination	71 (4)	72 (3)	69 (6)
Holistic and integrated approaches	68 (6)	67 (6)	71 (5)
Econ, soc and env sustainability	67 (7)	72 (3)	58 (10)
Respect of cultures	66 (8)	64 (10)	69 (6)
Social and economic viability	66 (8)	68 (5)	62 (8)
Accountability	64 (10)	65 (9)	62 (8)
Rule of law	54 (11)	57 (12)	49 (11)
Social responsibility	53 (12)	59 (11)	44 (12)
Gender equity and equality	46 (13)	49 (13)	42 (13)

Table 2: Normalized scores for each principle and group according to vessel length fleet (Ranking shown in parentheses)

Table 3: Normalized scores for each principle and group according to region (Ranking shown in parentheses)

Principle	All (38)	Burin (14)	Bonavista (18)	Avalon (6)	
Consultation and participation	75 (1)	71 (6)	76(1)	83 (2)	
Transparency	75 (1)	79 (2)	70 (2)	83 (2)	
Equity and equality	72 (3)	79 (2)	70 (2)	61 (8)	
Human rights and dignity	71 (4)	81 (1)	69 (6)	56 (12)	
Non-discrimination	71 (4)	76 (4)	70 (2)	61 (8)	
Holistic and integrated approaches	68 (6)	62 (10)	70 (2)	78 (5)	
Econ, soc and env sustainability	67 (7)	69 (7)	57 (10)	89 (1)	
Respect of cultures	66 (8)	64 (8)	61 (9)	83 (2)	
Social and economic viability	66 (8)	64 (8)	63 (7)	78 (5)	
Accountability	64 (10)	76 (4)	56 (11)	61 (8)	
Rule of law	54 (11)	33 (13)	62 (8)	72 (7)	
Social responsibility	53 (12)	57 (11)	48 (12)	61 (8)	
Gender equity and equality	46 (13)	48 (12)	43 (13)	56 (12)	

Table 4: Normalized scores for each principle and group according to vessel fleet and region (Ranking shown in parentheses)

Principle	All (38)	<40 ft Bonavis (9)	40-65 ft Bonavis (9)	<40 ft Burin (8)	40-65 ft Burin (6)	<40 ft Avalon (6)
Consultation and participation	75 (1)	74 (2)	78 (1)	71 (5)	72 (4)	83 (2)
Transparency	75 (1)	63 (9)	78 (1)	83 (1)	72 (4)	83 (2)
Equity and equality	72 (3)	74 (2)	67 (4)	67 (6)	94 (1)	61 (8)
Human rights and dignity	71 (4)	70 (4)	67 (4)	75 (3)	89 (2)	56 (12)
Non-discrimination	71 (4)	78 (1)	63 (7)	75 (3)	78 (3)	61 (8)
Holistic and integrated approaches	68 (6)	67 (5)	74 (3)	58 (9)	67 (9)	78 (5)
Econ, soc and env sustainability	67 (7)	67 (5)	48 (11)	67 (6)	72 (4)	89 (1)
Respect of cultures	66 (8)	56 (11)	67 (4)	58 (9)	72 (4)	83 (2)
Social and economic viability	66 (8)	67 (5)	59 (8)	63 (8)	67 (9)	78 (5)
Accountability	64 (10)	56 (11)	56 (10)	79 (2)	72 (4)	61 (8)
Rule of law	54 (11)	67 (5)	59 (8)	33 (12)	33 (13)	72 (7)
Social responsibility	53 (12)	59 (10)	37 (12)	58 (9)	56 (11)	61 (8)
Gender equity and equality	46 (13)	48 (13)	37 (12)	46 (12)	50 (12)	56 (12)

Figure 3 shows responses for all 38 fishers included in this data, for each principle.

Transparency had the highest number of fishers (m=19) sort the principle into the outer ring

(high priority). Conversely, only 3 participants sorted *Gender equity and equality* into the high priority category.



Figure 3: Describes distribution of answers according to each principle.

# 4.3 Qualitative Findings According to the 13 Principles

Following is an explanation of the qualitative data, which is explored according to each of the 13 principles. While quantitative data revealed a set of priorities, qualitative data showed the nuances and justifications behind these priorities, as well as varying interpretations which allow for adaptation of the SSF Guidelines to the NL context. There was much to be learned based on how fishers explained their answers. Because of the varying interpretations of the principles, at

the beginning of each section is an explanation of the definition that was presented during the data collection (on the back of the card), as well as a version of the adapted definition of the SSF Guidelines based on fisher responses in this study (definitions shown in Appendix II).

Below are the 13 principles according to rank, with explanations of some common points from

fishing people about their implementation. This study is consistent with Chuenpagdee et al.

(2017), where Transparency and Consultation and participation, scored as two of the "most

relevant" principles, and in this study were considered the two highest priorities.

# 4.3.1 Consultation and Participation (Priority 1)

*Card Definition*: Mechanisms and appropriate processes are put in place to enable meaningful participation of fishers in decision-making.

Adapted Definition: DFO keeps in touch with fishers by phone, email and in-person about policy changes and future decision-making. Fishers can easily speak with DFO to ask questions, seek help, or share views. Online and in-person meetings occur, with the opportunity for fishers to set the agenda of those meetings, so that DFO can understand fisher perspectives, irrespective of fishers' position in the union, access to technology, or distance from urban centers. Fishers' expert knowledge is acknowledged by the structure of consultations such that small-scale fishers are treated as equals in deliberation and recognized as primary stakeholders. Consultation occurs not just about quotas and seasonality, but a range of issues. Participation is meaningful, shared, and not burdensome.

Fishers discussed that there was consultation on a limited range of issues such as quotas and seasonality, but lack of meaningful consultation on other issues including MPA's, endangered species (notably rules surrounding right whales), quota sharing among fleets, boat length limitations, and intersectoral conflicts between small-scale fisheries, industrial aquaculture, and oil and gas. Fishers pointed out that the structure of consultations was hierarchical with fishers at the bottom. For instance, P44 stated:

There was always the impression that we started off in the hole when it comes to being equals, even though we were the major shareholders in the thing. But the DFO and the politics of the thing allowed that they knew more than we did.

Fishers expressed feeling 'participation-fatigue,' occurring when fishers tired of giving their input over many years with few perceived positive outcomes. Some fishers commented that consultations happened too much within the confines of FFAW-Unifor, questioning how an entity representing processing and offshore workers could also promote the interests of smallscale and inshore fishing people. P18 stated, "The problem we [have] is the consultations are totally with the union. So, if you're not in with the union, you've basically got no say. But DFO can't deal with 3,000 fish harvesters either." P18 commented on the complexity of consultations-that they rely on union membership, but in many ways that system makes understanding fishing perspectives manageable. P18, among others, shared that involvement and influence in decision-making with DFO relies on active membership and participation with FFAW-Unifor. Therefore, if fishers do not align with the union, they experience few opportunities for input on most governmental decision-making. Another concern for participants was the disconnect between small-scale and inshore fishers and government scientists, with fishers questioning how scientists doing stock assessments and studying marine ecosystems were reaching their conclusions. P21 stated, "We don't know what the scientist does, we know they're out there all summer. We don't know their story." Fishers were, for the most part, not opposed to scientific knowledge, but they often felt their own knowledge was underutilized. Fishers stated that disregard of local knowledge had been the cause of the cod collapse and yet little had changed regarding governmental decision-making, quota sharing among fleets, or regulations surrounding gear type to integrate small-scale knowledge. P42 stated:

86

They got the moratorium for thirty years and they haven't learned a damn thing about how to do it right. They still got gillnets in place, they still got draggers in place, and that's what caused 90% of our problems. The hook fishery never would ever hurt anything—never.

Thus, respondents felt that little was learned from the mistakes of the moratorium about how to respect and promote sustainable community-based small-scale fisheries, local knowledge, and small-scale fishing practices.

## 4.3.2 Transparency (Priority 1)

Card: Policies and decision-making are clearly defined and widely publicized.

*Adapted:* Fishers are made aware of the details of laws and policies before decisions are finalized. There is flow of information between government and fishing people on the reasons why decisions are made. Decision making is not done by hidden processes 'in an office,' but made clear to all fishers and widely publicized.

Fishers often expressed that they had little understanding on what bases DFO created fisheries regulations and found many DFO regulations impractical and non-sensical. This was true regarding the rule that a lobster boat must only transport its own lobster pots (and no one else's), or the rule that the shelving in a crab tank cannot be an inch over 3 feet apart. P36 explained that he had not learned about the crab tank rule until a fisheries officer was aboard his boat precisely measuring the distance between shelves. There was no warning given, and the fisher was written up for a violation. Many fishers, like P36, recounted being caught for breaking rules because they had not known about them. The lobster pot rule, prohibiting any boat other than the license holder from carrying them, made it illegal for fishers to bring in lost gear they had caught off the ocean bottom to return it to the original owner. It also made it illegal for adult fishers to help younger family members who had smaller vessels set out and take up their lobster pots in rough weather. Fishers expressed that the way rules and regulations were structured was not

transparent, that rules were hard to understand—what P44 called "gobbledy-gook." High prioritization of *Transparency* also had to do with fishers questioning representation through FFAW-Unifor. Fishers lacked clarity on whether FFAW-Unifor could have the inshore interest at the forefront of their participation in government decision-making when the union also had other potentially conflicting interests to support. Some fishers stated that there have been improvements in *Transparency* since the evolution of social media, where fishers can keep better connected with each other and thus better informed. For instance, P11 commented, "The web communication has improved a lot [...] letting people know ahead of time so they can argue before it gets passed. And all the [government] meetings that happen are posted on there." In sum, fishers thought *Transparency* needed a lot of work for implementation because they did not know why certain laws were in place and how and when those laws were made, and they questioned decision-making and representation in the government and union.

#### 4.3.3 Equity and Equality (Priority 3)

*Card Definition*: Fisheries laws and regulations are applied fairly and consistently, with due consideration for vulnerable and marginalized groups.

*Adapted definition:* Inshore and small-scale fisheries, tied to local communities through onshore processing, have priority access to adjacent resources. Efforts are made to avoid declining support and quotas for the small-scale fisheries relative to offshore fleets. Core and non-core fishers are guaranteed rights to make decisions over their enterprises.

*Equity and equality* was a priority for both small-scale and inshore fishers. Fishers were highly concerned about inequitable resource sharing between the inshore and offshore fleets. Regarding adjacency, inshore and small-scale fishers often expressed discontent with the extent to which offshore fleets had access to nearby resources. They explained that offshore fleets had quotas for resources which were close to shore. Large vertically integrated companies, such as Ocean

Choice International, greatly benefitted from these close-to-shore fisheries at the expense of the small-scale and inshore fleets and communities. For fishers in the 40-65-ft vessel length group, *Equity and equality* was the top priority. These fishers frequently commented on inter-provincial, inter-fleet, and international conflicts. Fishers in the 40-65-ft group questioned why DFO provides the offshore fleets with more quotas, while the offshore boats also have fewer conservation regulations and less benefits for coastal communities than the inshore sector. P35 explained:

The quotas are all backwards. The inshore creates way more jobs than the offshore. The offshore dragger goes out and brings in 400,000 pounds of turbot and provides 15 jobs, and then comes in and it's all frozen and that's that. For the inshore, 400,000 pounds provides jobs on all these different boats, and then processing jobs onshore in the plants. But with the way the quotas are divided between the inshore and offshore, there are no more plants left.

The extent to which fishers are impacted by these inequities also depended on region, resource availability and competition. For small boat fishers on the Burin Peninsula, inequities between the inshore and offshore were exacerbated by high competition among small-scale boats for fishing area and limited quotas. P15 explained: "Well now in the crab fishery, we have too many boats for the little amount of crab we got. And trying to share up the resource so everybody gets some is a problem." P15 described a problem of too many boats chasing too little an overall quota for that fleet. Conversely, small-scale fishers on the Bonavista Peninsula expressed they were satisfied with their quotas and resource sharing. P38 stated:

That's dealt with pretty good with because everybody got the same opportunity to do whatever fishery they want [...] like we got what we [small-scale boats] got and they [40-65 ft boats] got what they got, and if we want what they got, someone's got to go and pay for it.

In this sense, there was an abundance of resources and enough to go around to all the fleets. To get a bigger share just meant investing far larger sums of money for licenses and boats—

something many small-scale fishers were perfectly content never to do. In sum, fishers had many

varying concerns surrounding Equity and equality, differing for small-scale and inshore fleets. In

the small-scale fleet, fishers were concerned about high competition and small overall quotas,

while in the 40-65-ft fleet, fishers were concerned about adjacency and resource access relative

to the offshore fleets and other ocean industries.

# 4.3.4 Human Rights and Dignity (Priority 4)

*Card Definition:* Fishers have a right to fishing livelihood, an equal opportunity to participate in fisheries, and autonomy to make decisions about their fishing enterprises.

Adapted Definition: DFO's treatment of fishers fairly represents the inherent rights of human beings and traditional rights of small-scale fishers. As such, fishers are given the right to make decisions, in particular those decisions which keep the skipper and crew safe. Fishers speak up, know their rights, and stick together, and DFO is adaptive and responsive to fisher perspectives. Laws are eliminated which require fishers to conduct their operations in ways that promote loss of dignity, such as dumping dead fish at sea. Overall, the rights and dignity of those living in rural communities is respected equally to those living in urban communities, including access to essential services and healthcare, entertainment, and opportunities for economic growth.

Fishers related experiences regarding Human rights and dignity to their interactions with

government, sometimes correlating this principle with right to livelihood. Fishers commented on laws which made them feel loss of dignity and that conflicted with their perceptions of rights to livelihood. Laws which prohibited them to take fish home (traditional rights), or laws which caused them to do acts they believed unethical like dumping fish (dignity) contributed to fishers sorting this principle into high priority. Moreover, the invisible control of licenses by processors and the resulting poor price of cod made fishers feel that their dignity as fishing people was lost. Non-core fishers faced distinct challenges, with fewer opportunities and rights than core fishers. Fishers expressed having little autonomy or control over their livelihoods, when they were not granted core status after the moratorium, or when quotas were allocated to offshore trawlers instead of the inshore fleets. Some fishers expressed that the inshore fleets were overlooked by the government, or in a more extreme view, that the government had intentionally sought to eliminate small-scale fishing people. Conversely, a few fishers spoke of *Human rights and dignity* as well supported in the fisheries, stating that their job in the fisheries gave them a sense of autonomy and the ability to be their own boss.

#### 4.3.5 Non-discrimination (Priority 4)

*Card Definition:* Fisheries laws and policies are made in ways that do not discriminate or disadvantage certain sectors of the fisheries.

Adapted Definition: Small-scale fishers, even those without crab licenses or core status, can make a living alongside larger boats. Small-scale fishers and handliners have sufficient space and quota to make a viable living from the fisheries. Viability for the small-scale fleet entails that fish processing plants do not discriminate against or disadvantage smaller boats by offering a lesser price, but instead make efforts to increase the market value of a diversity of fish species. Large boats, companies and processors are prevented from gaining too much power. Rules and regulations are consistent across provinces and regions. Even fishers with little power or financial profit have an equal say in governance.

Fishers commented on discrimination regarding boat length restrictions, fish prices, and other sectors. Boat length restrictions was a topic that came up commonly and was often a reason that fishers felt there was a lot of work to be done regarding *Non-discrimination*. Fishers questioned why NL had more restrictive boat lengths for the small-scale fleet than other provinces. They pointed out that these restrictions posed safety issues, noting that quota limitations and fishing area already limited fishers' ability to grow their enterprises. Some commented that the larger boats can "do what they like," because they have bigger boats, better prices from the processors, and more lenient conservation rules. Processing plants, according to small-scale and inshore

fishers, had little interest in smaller volumes of fish or in a diversity of fish products and were only interested in large amounts of the high value species. This dynamic caused fishers to perceive discrimination from the processing plants favoring the larger boats with larger catches. P42 stated "A lot of companies, like [Ocean Choice International] and [Quinlan Brothers] are only interested in the big bucks. The crab is what they want." Others commented on discrimination in the laws between the fisheries and oil and gas companies, pointing out that oil and gas companies were allowed to conduct seismic testing in areas that were closed to fishers.

#### 4.3.6 Holistic and Integrated Approaches (Priority 5)

*Card definition:* Fisheries management takes into consideration ecosystem health, fishers' wellbeing, and community-based livelihoods.

Adapted definition: Government avoids focusing only on one fishery but encourages economic diversity of the fisheries. Government recognizes that, due to cross-sectoral integration, promoting or allowing industrial activities, such as fish farming or oil and gas exploration, may result in harm to small-scale fisheries and ecosystems. A small-scale and diversified processing sector is encouraged for healthy and successful inshore fisheries, to improve fish prices and community well-being. Management authority is decentralized from Ottowa and urban centers in NL into local communities.

Many fishers ranked *Holistic and integrated approaches* as high priority, despite not initially knowing what this principle meant. Fishers noted that the viability of the small-scale fisheries is overly dependent on one species, leading to vulnerability. Fishers who did not have a crab licences had trouble keeping their operations viable. This was due to low value for species other than snow crab and lack of secure access to a variety of quotas. Many fishers mentioned that DFO did give enough attention to regulating and improving the post-harvest sector, which respondents perceived as integral to small-scale fisheries livelihoods. Fishers pointed out that the number of fish plants had drastically declined, negatively impacting the viability of communities.

These fishers asserted that there was not enough government support for small-scale fish plants, while large companies had taken over the processing sector. In terms of balance of objectives in government decision-making, strategies, and planning—for instance between social and ecosystem principles—fishers stated that government put too much emphasis on ecosystem components and not enough on communities. P42, referring to government scientists doing stock assessments, stated, "[Scientists] don't care about fishers' well-being and community-based livelihoods. They just care about the ecosystem, which everybody should, but it gotta be done right."

## 4.3.7 Economic, Social and Environmental Sustainability (Priority 7)

*Card definition:* Extra care is taken to avoid undesirable outcomes from fisheries, like stock decline, or environmental degradation, which would have devastating social and economic impacts.

Adapted definition: Government and fishers take extra care to ensure the fishery is intact for future generations. Small crabs and lobsters and breeding females are kept alive. Measures are taken to improve science and increase the involvement of fishers in planning and charting scientific surveys. Prices and quotas are stable over time. Fisheries are protected from harmful activities like seismic testing and offshore trawling. Fisheries are not overfished. Fishers are not blamed for stock declines, which might be the result of several variables outside fishers' control. Communities are healthy and young people continue to become involved for the future continuation of the fisheries. Less destructive fishing gears are promoted, and small-scale fishers are recognized for having small environmental impacts. Measures are taken to ensure that new and emerging fisheries are preserved for the future and not overfished.

#### For the principle Economic, social and environmental sustainability, fishers sometimes

responded more to one component than another, which might have caused dissimilarity in responses. For instance, fishers often commented that environmental sustainability was strongly implemented, but regarding social sustainability, for instance recruitment of young people, there was uncertainty. Fishers expressed concerns about the loss of non-core licenses for the future sustainability of the small-scale fisheries (non-core fishers cannot sell or pass down their licenses). Fishers described some communities as "dying," with few fishers and young people remaining. Regarding economic sustainability, fishers often brought up the unpredictability of fish prices, which depend on global market fluctuations out of fishers' control. Nonetheless, many commented, like P17, "There's a good livelihood into the fishery for anyone that's interested in taking care of it." Some fishers expressed that environmental sustainability was the basis for all other principles, and without healthy fish stocks there would be no fisheries. Overall, fishers thought environmental management of fisheries was cautious with sufficient governance measures taken to protect fish stocks. Fishers wondered why, regarding ecological and environmental sustainability, inshore and small boat fishing people were held to a higher standard than offshore boats and other ocean sectors. Some fishers sorted environmental sustainability into high priority due to the perceived poor management of the offshore fleet. Contrarily, fishers responding to environmental sustainability in the small-scale and inshore fleets thought the principle was well-implemented. Many fishers perceived conservation and management within the small-scale and inshore fleets as going well.

## 4.3.8 Respect of Cultures (Priority 8)

*Card Definition:* Fishers' local knowledge and connections to the ocean are respected, seen as inherently valuable parts of culture and identity.

Adapted Definition: Traditional fishing grounds and handliners are respected. Fishers' knowledge is taken seriously concerning fish stocks and ecosystem changes. Fishers have the right to access and harvest adjacent and traditionally hunted fish and seals for personal food consumption and/ or livelihood. Larger boats give smaller, less technologically developed boats space on the water. DFO and fisheries officers respect fishers as educated and intelligent professionals. The values of fisheries and seal hunting are recognized and promoted as essential components of "living a good life" not just for fishers, but also for fish and marine mammals. Fishers' rights and culture are protected, which includes looking after recruitment and breeding of fish species so that fisheries can last long into the future.
Many commented, like P19, that fishing is "more of a respected profession now than what it was," and that "fish harvesters are a lot better educated now than they were at one time." This is in part due to the professionalization of the fisheries, but also as P18 stated—because of the money: "Now we got plenty of fishermen who are millionaires." Nonetheless, fishers hoped that the full range of fishing benefits and values would be more frequently acknowledged by the government. Some commented that professionalization had harmed the culture of fishing. Fishers fishing on the smallest scale expressed frustration that they had to compete with increasingly technologically advanced and industrial style boats in the small-boat fleet, questioning why there were so few protected fishing areas based on gear types, and why those that did exist were not acknowledged. Between the cost of getting into the fisheries and the challenges of professionalization, many fishers noted, it's no wonder that recruitment is one of the greatest challenges and that fishing cultures are disappearing.

### 4.3.9 Social and Economic Viability (Priority 8)

*Card definition:* Fisheries policies, strategies and plans aim to promote social and economic viability, and community resilience.

Adapted: Community vibrancy is promoted, giving the younger generation reasons to stay in the community. Viable small fish plants in each harbour and the ability to offload catch in one's own community is promoted. Quota and license cost is controlled and made affordable for small boat and young fishers. The attractiveness of job opportunities in the fishing industry is emphasized for reasons other than, and including, profitability. The essential role of small-scale and inshore fisheries in small communities is recognized and protected. Rural communities and the lifestyle it provides to residents there is valued and promoted, with government supports and funding to help these communities continue and thrive. Small boats with one quota can make a viable living based on quota and entrance costs into the fishery. Measures are taken to improve local markets for reduced vulnerability to global quotas, price fluctuations, and/ or crises. Owner-operator and controlling agreements are prevented, ensuring that economic benefits remain in communities.

Many fishers highlighted the immense role which fishing plays in the small towns as it pertains to the social and economic viability of businesses, hospitals, municipal taxes and revenues, and housing. Many, however, stated that the importance of this role is overlooked. P21 stated, "Oh my god, it's everything in small towns, but it seems like in the bigger picture it's not being looked at." P36 stated:

If you take the fishery out of Bonavista, there's nothing left. She's done. That's it for the town. Tourism is only the icing on the cake, and if you take the fishery away, tourism will be gone too because you've got nothing to come here for.

On the one hand, fishers felt the fishery provided stable and profitable livelihoods for them, their crew, families, and crews' families. P34, a Bonavista small boat fisher, explained, "For me it works out. For me I've got lots of opportunity. We make a good living." On the other hand, fishers noted the lack of recognition for these benefits and, as a result of lacking governmental support, degrading social networks and communities in small fishing outports. Fishers on the Bonavista Peninsula in particular expressed struggles, with some of them being the only fishing person left in their town. Dwindling numbers of fishers caused declining wharf infrastructure, while fishers had to begin offloading and keeping their boats in larger towns and finding crew elsewhere. While economically the fisheries provided a good living to participants, fishers expressed social structures had drastically declined. These included the number of fishers in an area, accessibility of fishers to their boats, community help (i.e. hauling boats out of the water or doing gear work), places to offload their catch, crew and other fishers, and the family networks of fishing people in communities.

# 4.3.10 Accountability (Priority 10)

*Card definition:* Individuals, government and businesses are responsible for their actions and decisions according to the law.

*Adapted definition:* The government makes widely available information about how and where decisions are made, and openly admits when decisions resulted in negative outcomes for small-scale fishers. Government holds sectors and industries other than fisheries accountable to the strict conservation measures by which small-scale and inshore fishers must abide. DFO takes responsibility for fisher safety by allowing fishers to act on self-identified safety measures. Fishers, government and businesses do not blame others, but collectively seek solutions to problems and accept when decisions were made wrongfully. Government and elected officials take responsibility for future and past decisions.

Fishers discussed DFO's accountability for safety, which was lacking, good science, which was

going alright, and enforcing the quota, which happened consistently. Fishers also commented on

this principle from a bottom-up perspective-that fishing people are accountable to following the

laws, whether they like it or not. As P23 stated, "I think that's [Accountability] pretty good.

Individuals... Fishermen end up in court every year, so we're definitely held accountable to the

law." Some noted that politicians should be more accountable for supporting the fisheries and

highlighting the benefits of the fisheries. P21 stated:

The politics, whoever is in this government, they're not for the fishery. Nobody comes in last minute until election time. You don't hear anything about the fishery anymore, it's all about oil. All these young people trying to get into the fishery, you'd think the government would help them. You think all these bay and inlets and the fish farms coming here—you'd think the government wouldn't let them come here, but the government is letting them. You don't hear about the fishery. Tourism, fish farms, oil, but nothing about the fishery. It's pretty well the backbone of Newfoundland with what it brings in.

Others, such as P16 who noted, "Well, nobody wants to be wrong," recognized the complexity of this principle.

## 4.3.11 Rule of Law (Priority 11)

*Card:* Laws applied to small-scale fisheries must be made known to fisher people and are consistent with other commitments and obligations.

*Adapted:* Poaching is uncommon due to fisher education and strict monitoring. Rules are not overly prescriptive, with safety as the number one priority. Fishers understand conservation rules through education. Rules do not change quickly but are responsive and adaptive to an extent. Rules are simply stated and not overwhelming in number. Fisheries officers work with fishers to make them aware of laws before penalizing them. Fisheries officers appreciate fishing culture and are not "out to get" fishers. Fishers can work on the water without being subjected to constant and unavoidable fines.

Many fishers felt Rule of law was well-implemented. However, on the Bonavista Peninsula, six of eighteen fishers sorted this principle into high priority. For these fishers, the expectation that all rules will be followed perfectly was unrealistic, considering the large number of rules, the difficulty of understanding those rules, and the rate at which new rules were added. On this last point, P42 stated, "I [leave] here fishing in the morning, I don't know what rule has changed the night before." The overwhelming number of government regulations and nature of those regulations indicated to fishers that DFO has little interest in understanding fishing culture or practical fishing knowledge. Even when fishers made their utmost effort to know and understand all the rules, there were rules which they had no idea about-when they became rules, who decided on those rules and why those rules were there. Moreover, fishers spoke of perceived harassment by fisheries officers who expected fishers to follow all the rules perfectly all the time, even though they themselves (the officers) did not know all the rules. P42 stated, "Small boats you can bully [them] better. I got stopped five days in a row and they checked my license every day." Respondents who were traditional small boat fishers often reported similar stories of feeling picked on by the fisheries officers unfairly, whether it was out on the water while fishing, or onshore at their workshop.

## 4.3.12 Social Responsibility (Priority 12)

*Card definition:* Community cohesion, collaboration and corporate responsibility are encouraged and promoted.

*Adapted definition:* Fishing communities are close and caring with the absence of excessive social conflict. Fishers support and strictly follow conservation laws. Fishers offload a certain portion their catch in the home port/ community to ensure small-boat wharf infrastructure and maintenance is continued. Fishers support, when possible, small and local buyers and fish companies. Fishers, plants and communities work together. Fish plants look after the fisheries workers and fishers. Fisheries provide a decent living (paying the bills plus a little extra) to not just skippers but also crew and plant workers, as well as spinoff industries, local businesses and government jobs.

Fishers responded that *Social responsibility* exists strongly among fishing communities, with fishers having an acute sense of accountability and responsibility towards each other, the overall community and the environment. Thus, *Social responsibility* was ranked low and considered well-implemented. Eleven of 38 respondents sorted *Social responsibility* into the high priority category, with many of these fishers commenting on *Social responsibility* from the regulatory perspective. For instance, P42 commented that there was low *Social responsibility* in the allowance of gillnets and draggers because of the environmental harm and the lower grade catches that these gear types produced. P43, sorting this principle into middle priority, commented that there was a good sense of *Social responsibility* among fishers, but there was tension between the fish plants and the fishers. This fisher stated, "Those relationships are driven by economic gain [not responsibility]." P44, also sorting this principle into middle priority, stated that there was lack of respect towards the traditional small boats, with everyone assuming that larger, more technologically advanced boats were superior. Nonetheless, P37's comments sum up many of fishers' responses to *Social responsibility*:

We've really stuck together around here. It's really just like the community thing. You notice something on the go, you go up past the wharf and there's a bunch of cars. You know then, we all usually gets together then. Anytime we usually have issues and bring it further, we end up getting something to come back from it.

Fishers interpreted *Social responsibility* as the measures they had taken voluntarily and by mandate to conserve resources including v-notching lobsters, throwing small crabs and lobsters back for future sustainability, filling out logbooks accurately, and following rules as closely as possible. P25 and P21 even saw spending the money they made from fisheries in local businesses as a form of *Social responsibility*, in that spin-off money from fishing helps businesses and individuals in the community. Many skippers noted that they had a responsibility to the crew to make them a good living based on how much the boat was catching (each crew gets a percentage share). This was a fundamentally different perspective than the large vertically integrated companies who pay crew based on wages.

# 4.3.13 Gender Equity and Equality (Priority 13)

*Card Definition:* The vital contributions of women in fisheries, on and off the water, need to be recognized, along with institutional support for women to own and operate their own vessels.

Adapted Definition: Women's participation in the fisheries on and off the water is respected, which means acknowledging the role that women play in the community such as raising families or doing bookwork. Young women take leading roles in the fishery including running their own enterprises and no one, including community members, or government employees, questions or second guesses a woman's involvement or ability to participate in the fisheries. Young girls and women are encouraged to become involved in the fisheries, with help gaining access to certifications, licenses, and safety and training courses to become professional fish harvesters.

Fishers noted that *Gender equity and equality* was well implemented due to the large role that women play in the fisheries on and off the water and the equal opportunity for women to become involved in the fisheries. Many recalled the overall importance of family involvement in the inshore and small boat fisheries, commenting that fishing is a family business. P34, a Bonavista small boat fisher stated: "If we didn't have the women home, we wouldn't be able to fish, so that's the other part of it, they're backing us." Many commented that women's role in the fisheries has transformed from processing the fish in the traditional way to working in the fish plants and providing onshore support to working on the water alongside the men. Overall, the consensus was that women have always played a central part in the small-scale and inshore fisheries in numerous ways. P38 noted, "Women at one time would never be on the water—that just wasn't their job. But now women are probably one-third into the fishery, which is good to see." Nonetheless, fishers commented that, though there was nothing preventing women from becoming captains, there were not many women at the helm. One young woman looking forward to running her own family's enterprise was hopeful that this was going to change: "So like for a woman fishing? I support it 100%. I encourage every girl, any girl, even if I don't see that you're tough, I encourage you to go and try it." Many fishers stated the difficulty of entrance in the fisheries was irrespective of gender. As P18 stated, "It's hard for anybody to get in the fishery because the prices of licenses are so much now."

#### 4.4 Identifying Pathways to Blue Justice Based on Fisher Perspectives

Implementation of the SSF Guidelines requires strong and detailed research work in legal and policy analysis (Nakamura et al. 2021), as well as understanding how principles are practiced on the ground. Integrating fishing perspectives becomes a way to change decision-making structures for better implementation of the SSF Guidelines principles and pathways to governance learning. In this study, *Consultation and participation* and *Transparency* were the two highest priority principles, with *Equity and equality* as the third highest priority. Through better incorporation of

these principles into laws and policies, there are many opportunities for improved governance outcomes, including improved quality of interactions, governability, and integration between the three orders of governance. There were also principles considered well-implemented from the bottom-up such as *Social responsibility* and *Accountability*, with institutional barriers to building on these strengths for better conservation of resources and community well-being. Advanced alignment for Blue Justice can occur thus through recognition of strong social networks among fishing communities with space for local autonomy, as well as strengthened institutional support for small-scale fisheries people from governmental bodies.

Three themes arose prominently among fisher perspectives, prioritizations, and interpretations of the 13 SSF Guidelines principles, revealing gaps in implementation of the SSF Guidelines principles in first order operations and practices.

First, fishers experienced that there are inequities between the offshore and inshore sectors. Under present resource-sharing arrangements, there is misalignment between third order principles, such as *Equity and equality*, adjacency, and *Holistic and integrated approaches*, with first order governing practices, such as quota allocations. Study 2 indicates that increasing equity between fleets, for instance in how resources and space are allocated, is one key pathway towards Blue Justice.

Second, fishers experienced lack of autonomy, with the perception that the fisheries are overregulated, despite strong local conservation ethics and values. Study 2 responses indicate a gap between strong bottom-up implementation of certain principles, such as *Accountability* and *Social responsibility*, and second order laws and policies, which failed to recognize local stewardship. For instance, respondents perceived unfairness and held distrust about what offshore boats were allowed to do conservation-wise, as compared with the inshore and small-scale fishing fleets, which they perceived as over-regulated. Perceived over-regulation of the small-scale fisheries negatively impacted fisher well-being, as well as governability of the system, by creating tension and conflict. On the one hand, Study 2 finds that perceived over-regulation of the small-scale fisheries relative to the offshore fisheries, in some regards, fails to recognize local stewardship (*Accountability* and *Social responsibility*) and inhibits implementation of principles, such as *Environmental sustainability* (because fishers become less willing to voluntarily conserve resources when they have little decision-making power or when they are dissatisfied). On the other hand, there are still areas which require increased institutional support, such as tenure and distinct legal recognition and representation, which support implementation of a range of SSF Guidelines principles.

Third and finally, fishers felt there was weakness in integration of community knowledge into decision-making and fisher representation in governance structures, relating to implementation of *Transparency, Consultation and participation, Rule of law*, and *Respect of cultures*. Fishers perceived that they were not adequately involved in decisions that impacted them and unable to follow rules which they did not know about or understand. From fisher perspectives in Study 2, there was a disconnect between fisher knowledge and governance outcomes, for instance in the continued support from governments in the form of quotas for the offshore fleet. From the interactive governance theory perspective, it is also possible that lack of integration of fisher

knowledge has inhibited governance learning and adaptability to address system complexity (Lebel et al. 2010; Jentoft and Chuenpagdee 2009).

### 4.4.1 Blue Justice and Equitable Sharing of Resources

NL fisheries problems have often been framed by the narrative of overcapacity, which states that there are too many fishers chasing too few resources (Walsh 2011, Clift 2011). However, responses in Study 2 indicate that challenges in small-scale fisheries viability can also result from inequitable resource sharing arrangements between the large- and small-scale fleets. This was true regarding respondents' stories surrounding challenges in economic viability, in terms of income, as well as challenges in social viability, in terms of recruitment of fishers into the industry. Respondents' accounts of inequity as the cause of viability challenges contradict longstanding narratives about excess capacity as the main cause of problems in NL's small-scale fishing fleets. Many fishers commented that policies such as enterprise combining, which encourage rationalization of the fishing fleets, and elimination of small boat enterprises, has benefitted them by allowing them to grow their enterprises. They now have bigger quotas and thus more profits. Nonetheless, respondents also expressed that implementation of principles like Equity and equality and Social and economic viability was challenged by inequitable resource sharing arrangements, which did not leave sufficient quotas for the small-scale fleet. Inequitable resource sharing arrangements, with small individual quotas for the small-scale fleet, put increased pressures on enterprises to combine. Combining of enterprises causes the overall number of fishing boats and fishers to shrink, while the size of individual enterprises grows (Sabau and Boksh 2017). As enterprises grow larger, along with entrance costs, there are not

only fewer fishing people, but also fewer viable pathways for young and new entrants into the fisheries. This is because the easiest entryway into the fisheries is to buy and run a small-scale enterprise (personal experience). Thus, to improve recruitment challenges, it is necessary that these small-scale enterprises remain viable and accessible. *Equity and equality, Social and economic viability*, and *Economic, social and environmental sustainability* are all negatively impacted by inequitable resource sharing between the small-scale, inshore and offshore fleets. In a more equitable scenario, the small-scale fleet would have larger quotas relative to the offshore fleet, less pressure to combine enterprises, and more viable and profitable small-scale enterprises. Larger quotas for the small-scale fleet would leave more fishers in the water and more available pathways for entrance into the fisheries for young people, with increased benefits for fishing communities.

Authors like Nayak and Berkes (2010) have brought attention to inequitable sharing of space and resources on the waterfront as fundamentally tied to social and environmental injustice. More just and equitable sharing of resources between inshore and offshore fleets is central to advancing alignment for Blue Justice. From the small-scale fisheries perspectives in Study 2, equity and adjacency are not only about economic security (*economic viability*), but also centrally related to fishing culture (*Respect of cultures*), dignity (*Human rights and dignity*), conservation of resources (*environmental sustainability*), relational well-being (*Holistic and integrated approaches*) and identity. When respondents experienced DFO allocating quotas or adjacent resources to offshore fleets from other provinces based on 'historical use rights,' as was the case in the halibut fishery between Nova Scotia and Newfoundland, small-scale fishers expressed feeling a loss of dignity and autonomy. Government decisions favoring the offshore

fleet inspired distrust within small-scale fishers for the governance process. This was true particularly for those respondents who had lived through the cod moratorium. They understood inequitable resource sharing arrangements as evidence of poor implementation of *Consultation and participation* and *Respect of cultures*, considering past environmental damage done by offshore boats. Literature shows that fishers experiencing inequities are also less likely to advocate for conservation measures (Epstein et al. 2018; Bennett et al. 2020). Thus, Blue Justice is intimately tied to equitable sharing of resources, conservation measures which allocate quotas to the small-scale fleet, and integration of fisher knowledge about fish stocks in quota sharing arrangements.

While equitable resource sharing is vital for Blue Justice, institutional support for fair fish prices is also required. Because the small-scale fleet has lower volume catches and quotas, higher value for fish landings is vital for ensuring small-scale *economic viability*. As Parker et al. (2015) show in Australian fisheries, a high-value, low-volume fishery can benefit not just fishing people, but also the *environmental sustainability* of resources. This is because boats do not need to catch as much to make profits, thus exerting less pressure onto fish stocks to support economically viable enterprises. Higher value of fish landings relies on better markets, but also fair bargaining practices. This allows small-scale fishers to receive the appropriate price for their catch and prevents processors from low-balling fishing people. According to respondents, the provincial Price Setting Panel no longer ensures a fair bargaining process for fish prices. In NL, a corporatized and powerful processing sector (see Andrews et al. 2022) results in discriminatory pricing of fish in the first order, despite the existence of the Price Setting Panel. Different pricing schemes, reported by respondents, for small- and large- volume vessels led to poor

implementation of *Non-discrimination*. As a result of a powerful processing sector, globalized marketplace, and ample governmental attention towards high-volume offshore catches, smallscale fishers in Study 2 reported having little autonomy over fish prices. This study finds, similar to Smith et al. (2014), that small-scale fishers are not receiving a fair price for their catch under the present system. Part of these power inequities is a result of ineffective institutional support in the second order, which is intended to promote fair fish prices. For instance, due to power inequities between the processing sector and small-scale fishers, respondents reported that the Price Setting Panel is no longer performing its intended function, which is to create a fair platform for bargaining for fish prices. Lack of effective institutional support for fair fish prices created inequitable market conditions and lack of autonomy for fishers in Study 2, who also reported vulnerability and uncertainty for their fishing communities as symptoms of these issues. Advancing Blue Justice thus requires that second order institutions support market diversification, as well as fair bargaining practices for increased value of fish. Fair bargaining practices entail that the processing sector is non-corporatized and competitive. Overall, finding pathways to improve this system, for instance by allowing small-scale fishers to bargain autonomously for fair prices, will be vital for supporting Social and economic viability, as well as Non-discrimination and Equity and equality.

### 4.4.2 Implementing Bottom-up Governance

Responses in Study 2 show that incorporating bottom-up governance approaches, with participation and local autonomy at the forefront, can support implementation of principles including *Consultation and participation*, *Human rights and dignity*, and *Economic, social and* 

environmental sustainability. Fishers in Study 2 reported a strong sense of stewardship (Accountability and Social responsibility) in caring for their communities and the environment. These responses show that fishers are invested in the future of resources and their communities' well-being. However, many respondents stated there was lack of Accountability on the part of the government to recognize and support the benefits of small-scale fisheries in coastal economies and social networks. Simultaneously, respondents perceived that DFO micro-manages and overregulates the small-scale and inshore fisheries, with too many rules and not enough space for fishing people to make their own decisions. Even still, Study 2 fishers perceived DFO as letting offshore boats "do what they like" (P24). This perception was based on the notion that offshore boats have less regulations surrounding what species they can keep, larger quotas, and fewer chances of having enforcement aboard the vessels. P14, a crewman from a factory trawler offshore who was having his retirement party the day I interviewed him (not included in the inshore and small-scale fisher data), supported this perception, stating, "They process everything that they catch. Nothing is thrown back in the water. Everything that comes off the bottom stays." While many small-scale and inshore fishers recalled having to dump fish because of impractical legislation, P14's response shows the different standards which the inshore and small-scale fishers are held to.

Based on findings in Study 2, integration of various components of the community and building on the strengths of fishers' sense of stewardship can increase governability. Responses show that governance presently is in a state of division and controversy between fishers, the government, the fisheries union, and other ocean sectors i.e., offshore fleet. Many respondents expressed a sense of injustice in the over-regulation of the fisheries and simultaneous distrust that the

government would protect and support them, their livelihoods, and their communities. Epstein et al. (2018), based on empirical research in the Great Northern Peninsula region of NL in the Northern Shrimp fishery, found that fishers may be more willing to participate in governance and conservation measures when they have a voice in decision-making, autonomy over local resources, and diversified fishing operations (relying on more than one species). This study is complemented by the notion in interactive governance theory, explained by Chuenpagdee et al. (2011), that governance becomes more complex when there are high levels of disagreement. This study indicates that tension and disagreement caused by over-regulation of the fisheries, and inequity, has made the overall governability of the system decrease. Allowing for increased autonomy in fishing communities, so that fishers are able to make decisions based on values of Social responsibility and Accountability, has the potential to improve fishers' well-being, as well as the overall governability of the system. Creating a regulatory system for small-scale fishers that is less complex (fewer in the number of rules), with more consistency across regions (within NL and Atlantic Canada), and carving out areas for local decision-making among small-scale fishers, can allow for better implementation of key principles and advancement towards Blue Justice.

Nonetheless, increasing community autonomy for sustainability and governability must be complemented with increased governmental *Accountability*. According to respondents, this means explicit support for tenure, as in continued access to fishing resources and licenses and protection against infringement of other industries. Study 2 shows that government is responsible for supporting conservation by allocating quotas to the small-scale fleet and preventing destructive ocean practices in other industries from occurring in small-scale fishing waters.

Institutional support is needed to help diversify viable fisheries through market supports and quota allocations for the small-scale fleet. Supporting protected fishing areas for sustainable gear types can support conservation and small-scale fisheries viability. Also, decreasing entrance barriers, including financial and education barriers, and allowing non-core license holders the opportunity to make a viable living through access to key licenses and the opportunity to pass down their licenses will be key for small-scale fisheries sustainability. Lack of access for fishers with low level of education and little financial resources conflicts with Section 6.14 the SSF Guidelines outlining "equal opportunities for all boys and girls and young men and women." Government is responsible for supporting communities and conservation of resources (*environmental sustainability*), protecting small-scale fisheries rights, and supporting local autonomy.

#### 4.4.3 Integration of Fisher Knowledge

Part of making the shift towards holistic and integrated governance, will be incorporating diverse forms of knowledge into the governing system as a way to address complexity, increase governability through knowledge sharing (Kooiman et al. 2005), and implement transdisciplinary governance approaches (Chuenpagdee et al. 2019). There is evidence that moving towards bottom-up and interactive modes of governance increases governability (Jentoft and Chuenpagdee 2009), where fisher knowledge is useful not only as an input for decision-making, but to craft, conceptualize and envision what ocean resources mean for communities and how they can be cared for and utilized by governance arrangements (Armitage et al. 2012; Edge and McAllister 2009; Hauzer et al. 2013; Pahl-Wostl 2009; Lebel et al. 2010; Hurlbert and Gupta

2015). Better integrating fisher knowledge into decision-making has the potential to increase *Transparency* and *Consultation and participation*, principles with high importance for enhancing the quality of interactions and enlightening governors to the various and diverse interests and aspects of the governing system. *Transparency* can also improve outcomes for small-scale fishing people and environments by better enabling fishers to understand and comply with conservation measures (Davis and Hanich 2022; Guggisberg et al. 2022; Merten et al. 2016; Petersson 2022).

In NL, implementation of *Transparency* and *Consultation and participation* are hindered by DFO's hierarchical decision-making structure, and operationalization of DFO's consultation and co-management principles, which according to Study 2 responses is interpreted narrowly. Study 2 shows the high diversity of fisher perspectives in the system and thus level of diversity. As Kendall's coefficient test of concordance shows, there were differences in opinion even among the small boat fleet participants, meaning that government implementation of Consultation and *participation* must account for that diversity. Increasing consultation cannot be interpreted as 'more influence on quotas,' which could ultimately harm environmental sustainability, but instead as broadening and elevating fisher-government interactions to create more cohesion between fishers' experiences in the first order and institutions such as laws and policies in the second. Actions and decisions related to climate change, marine spatial planning, gear or vessel requirements, establishment of protected fishing areas, engagement with fisheries officers, and formation of marine protected areas all need to be guided by *Transparency* and *Consultation and* participation with diverse sets of fishing people. Decisions cannot be properly made without all the information, and fishers are central to this knowledge base. Inclusive governance requires

acknowledging that there are diverse ways of being a fishing person and that there is much to be learned directly or indirectly from a people with ocean-based sustainable livelihoods for improved knowledge and learning, governability, sustainability of fishing communities, and well-being and dignity of fisheries peoples. Implementation of these principles has the capacity to demystify, clarify, and reveal components of the governing system to fishers and lawmakers alike (Song and Chuenpagdee 2015; Garrett et al. 2012). Recognizing that small-scale fisheries people hold a distinct and important place in the coastal space and that it is necessary to protect and preserve these livelihoods will be crucial for governmental actions to reach out to smallscale fisheries people before making decisions which affect them.

### 4.5 Interactive Governance and Enacting Blue Justice

This chapter reviewed data from fisher perspectives to identify priorities for action regarding implementation of principles in the SSF Guidelines. While Study 1 covered a range of topics in the SSF Guidelines and their alignment with laws and policies for NL fisheries, Study 2 was laser focused on principles and fishers' perceptions of what they mean and how they are presently enacted. Study 2 revealed many examples and stories of how principles are practiced on the ground in NL, as well as gaps and areas for improvement. Study 2 has revealed adapted definitions, based on responses, of what the SSF Guidelines principles might mean in this context, as well as exploring some key pathways for advancement towards Blue Justice.

# **Chapter 5: Lessons from Legal and Fisher Perspectives**

The examination of the implementation of the SSF Guidelines in NL from the two perspectives – legal and fisher – reveals many key insights. Study 1, the legal perspective, provides information on the alignment and gaps in law and policy documents, thus offering a strong basis to start implementing the SSF Guidelines. Study 2, speaking with fishers, provides vital information about how principles are implemented on the ground—information which cannot be ascertained from the legal perspective. The two perspectives interact such that the legal perspective provides evidence for gaps in alignment with the SSF Guidelines which fishers may also be experiencing. They complement each other in helping reveal pathways for actions to advance Blue Justice. Specifically, they show gaps between the second and first orders of governance, when principles are present in laws but poorly operationalized in practice. Together, these two studies show the need for, as well as suggest some key pathways to, implementation of the SSF Guidelines in NL. Implementation of the SSF Guidelines is vital for walking towards Blue Justice for small-scale fisheries peoples in Canada.

## 5.1 Legal Issues Revealed by the Two Studies

From the legal perspective, there is considerable coverage of the SSF Guidelines, but also key gaps including the lack of a distinct legal category for small-scale fisheries, lack of tenure rights/ secure access, and use of preferential exclusive zones (*Equity and equality*, *Gender equity and equality*), lack of recognition of the linkages between sectors (*Holistic and integrated approaches*), and lack of distinct representation for small-scale fisheries people (*Consultation*)

*and participation*). Study 2 found key gaps including inequitable sharing of resources (*Equity and equality, Social and economic viability*, and *Economic, social and environmental sustainability*), lack of recognition of cross-sectoral linkages between small-scale fisheries and other industries such as onshore processing, oil and gas, and aquaculture (*Holistic and integrated approaches, Social and economic viability*), lack of bottom-up approaches to governance (*Accountability, Social Responsibility, Consultation and participation, Human rights and dignity*), and lack of integration of fisher knowledge in governance and decision making (*Consultation and participation, Respect of cultures*). Below are key legal issues drawn from the two perspectives.

### 5.1.1 Tenure/ Secure Access to Licenses

Study 1 found that key pathways for increasing tenure include creating a distinct legal category for small-scale fisheries, recognizing the role of women in small-scale fisheries, increasing equity regarding quota allocations, and finding ways to implement partial/ exclusive fishing zones based on gear type. Findings from Study 2 indicate that fishers also experienced lack of tenure, in particular regarding inequitable quota sharing between the inshore and offshore fleets. Respondents did not have secure access to licenses, quotas and adjacent territories due to these inequities. Moreover, rationalization of the small-scale fleet created challenges in recruitment, whereby a structure centered on larger, more industrialized small-scale fishing operations excluded new entrants from gaining access based on financial barriers.

## 5.1.2 Legal Recognition

Study 1 found that professionalization was important for recognizing fishers as professional, but also potentially limited access to those on the smallest scale and created potential barriers for entry. From fishers' perspectives, professionalization—as well as high incomes due to enterprise combining—contributed to strong implementation of *Respect of cultures*. However, professionalization caused some small-scale, full-time fishers to lose recognition and access after the moratorium because they were not considered as holding "key" licenses (also found by Clarke 2003). Fishers in Study 2 commented that the inability of non-core fishers to own key licenses or pass their licenses down was negatively impacting implementation of principles in the SSF Guidelines. This was true regarding implementation of *Economic, social and environmental sustainability*, when P10 stated,

In respect to core, that's making it less sustainable in a sense now because it was developed after the moratorium, but now those non-core licenses are being lost because they can't be transferred in any way, sold or passed down.

This was also true regarding *Human rights and dignity* for one non-core fisher interviewed who commented on limited decision-making ability due to his non-core status, as well as being unable to pass his license down to his son even though he is the last remaining fisher in his town. This also negatively impacted fishers' interpretation of the *Equity and equality* principle, with perceptions of large inequities between core and non-core fishers. Findings from Study 1 and 2 suggest that professionalization is an important aspect of alignment with the SSF Guidelines. However, increasing alignment requires attention to the "range and diversity of the small-scale fisheries subsector," as outlined by Section 12.1 of the SSF Guidelines, thus broadening legal recognition so that professionalization includes those fishing on the smallest scale. Social and

community structures, which in some cases are disappearing due to poor recruitment, could be better supported by allowing non-core fishers to pass down licenses, as well as better implementation of the parts of the SSF Guidelines which stress decision-making rights and economic opportunities for small-scale fisheries people.

### 5.1.3 Representation in Institutional Arrangements

Study 1 found that representation occurred through formalized co-management on issues surrounding seasonality and quota and was primarily through the FFAW-Unifor, with no distinct representation for the small-scale fleet. In Study 2, fishers were concerned about representation through FFAW-Unifor, commenting that consultations were too narrow and hierarchical (with DFO at the top). Moreover, respondents commented that fisher knowledge was not integrated enough into existing laws and regulations, and that the fisheries were overregulated with little regard for fishers' practical and experiential knowledge, *or* fishers' local values including *Accountability* and *Social Responsibility*. Study 1 and 2 findings show that representation needs to account for the specific needs of owner-operators and small-scale fishing people, as well as a range of voices within the small-scale fleet which is diverse. Also, a range of topics beyond quotas and seasonality needs to be accounted for in consultations. Seeking diverse ways to integrate and engage with fishers' knowledge on matters outside seasonality and quota, as well as continuing to engage with FFAW-Unifor, will be crucial for adequate representation, as stated by Section 12 of the SSF Guidelines.

### 5.2 Alignment between the First and Second Orders

The findings from Study 1 and 2, shown by Figure 1, reveal the extent to which what was found from the legal perspective, in the second order, can be reinforced by the fisher perspective in the first order and vice versa. The principles were placed into the different quadrants based on the findings from each of the studies. Principles placed in Quadrant 1 were considered high coverage by the legal perspective and high priority from the fisher perspective, representing a gap between the second order coverage and first order experiences (i.e., principles are present in the laws, but are not being implemented on the ground). Principles placed in Quadrant 2 were considered high coverage in laws and policies and low priority by fishers, representing continuity between the first and second orders (i.e., principles in laws are being carried out). Principles in Quadrant 3 were considered having low coverage in laws and policies and low priority by fishers. These principles are well-implemented from the bottom-up, through the actions of fishing people. Principles in Quadrant 4 are considered high priority by fishers and low coverage by the laws, showing continuity between the two studies/ orders (i.e., principles have lack of legal coverage, and are not being implemented). These principles are the hardest to implement because they lack legal basis (Study 1) and need a lot of work to be implemented (Study 2). Below is an explanation of each of the principles in each quadrant.



Figure 1: Mapping of principles based on Study 1 (coverage) and Study 2 (priority), response from all fishers (38), including small boat (<40 ft) and inshore (40-65 ft).

## 5.2.1 Quadrant 1 (High coverage, high priority)

Principles in Quadrant 1 were found to have extensive legal coverage in Study 1 and perceived as high priority by fishers in Study 2. Thus, Quadrant 1 shows a gap between coverage by the legal instruments (high) and implementation on the ground (poor). These principles require further action and attention to increase alignment on the ground, even while they are strongly represented by the laws. While *Consultation and participation* is well-covered by laws and policies in Study 1, from fishers' perspectives in Study 2 this principle is lacking. This was not only true regarding representation through the FFAW-Unifor, which was too broad an organization to represent the specific and distinct needs of the small-scale fleet all the time, but

also regarding the ways that representation occurred, which was one-dimensional with little capacity to integrate broader community knowledge into decision-making. From the legal perspective in Study 1, Non-discrimination was represented strongly by the general legislation, with little understanding of what this could mean for small-scale fisheries people. Speaking with fishing people clarified that *Non-discrimination* is important in terms of fish pricing between small and large boat fleets, as well as boat length restrictions, which are the most restrictive in the NL small boat fleet, relative to other provinces and all other fleets. In Study 1, Human rights and dignity was well-covered by general legislation, but not generally discussed in a fisheries context. Respondents in Study 2 felt the fisheries are over-regulated, leaving very little autonomy and decision-making power to fishing people, meaning that this principle was high priority. Respondents felt their dignity had been taken away by laws which were unfair and impractical, including laws which resulted in them having to dump dead fish at sea. Those living in small rural places felt their rights were not equal to those living in urban centers, with limited access to essential and non-essential services. Thus, for fishers in NL, Human rights and dignity not only applies to fishing people, but all people living in rural communities.

If the figure was changed to only represent responses for the small boat fleet, *Social and economic viability* and *Economic, social and environmental sustainability* would also be in Quadrant 1. Due to the precarity of social networks in small towns, trends towards rationalization, and dwindling numbers of fishing people in some areas, as well as inequitable sharing of resources between small-scale, inshore and offshore fleets, *Economic, social and environmental sustainability* was ranked third highest for the small-scale fisher group. Due to weak quotas in the small-scale fleet *Social and economic viability* did not rank as highly among small-scale fishers as it did in the 40-65 ft fleet. Though sustainability and viability have high coverage in laws and policies, their implementation is being experienced differently between small-scale and inshore fishers. Small-scale fishers have the least impact on ocean resources, yet respondents in the small-scale fleet perceived the most precarious future regarding their own sustainability.

## 5.2.2 Quadrant 2 (High coverage, low priority)

Quadrant 2 represents agreement between the legal and fisher perspectives. These are principles which are present in the legal instruments and, according to fishers, are also being implemented in practice. These principles represent the strengths for both fishing communities and legal instruments. From the legal perspective, *Gender equity and equality* was well-covered with little indication of what this meant for fishing communities. For fishers in Study 2, the role of women was prominent and central, despite recognition of high barriers for entrance into the fisheries, making this principle overall well-implemented. *Rule of law* was clearly outlined by nearly all of the legal documents, most importantly the Constitution Act (1982), and for fishers was somewhat well-implemented with fishers following and understanding the laws to the best of their ability, despite there being confusion about where laws came from and some mistrust concerning fisheries officers and enforcement. This related to *Accountability*, which fishers stated was well-implemented because fishers were accountable to the rules and upholding conservation measures. *Economic, social and environmental sustainability* and *Social and economic viability* were well-implemented for fishers in the 40-65-foot fleet, who foresaw a

strong future for the resources and fishing boats, and viable livelihood from the fisheries. For small-scale fishers, this was not the case, explained above.

## 5.2.3 Quadrant 3 (Low coverage, low priority)

Quadrant 3 represents those principles which from the legal perspective need work, but from fishers' perspectives are well-implemented, indicating bottom-up implementation. *Social responsibility* is implemented strongly from the perspective of fishers. Local and community values have been sustained, despite fishers' ample frustrations with over-regulation on the part of the government. Instead of micro-managing fishers' enterprises, as was the case in the stories of fishing people, legal structures could better prioritize bottom-up and community-driven actions, decision-making and autonomy to align with local values. Thus, government could leave space for fishers and communities to enact meaningful and positive change in accordance with their own community beliefs. *Respect of cultures*, and what that might look like in NL, was not well-understood until speaking with fishers. From fishers' perspectives, *Respect of cultures* was interpreted as closely related to professionalization. Thus, it is important to adapt the principles to context to understand whether or not they are well-implemented and which legal instruments apply.

### 5.2.4 Quadrant 4 (Low coverage, high priority)

For principles in Quadrant 4, fishers' perspectives and the legal perspective are in agreement. These principles lacked strong presence in the laws, and similarly required a lot of action and attention for implementation according to fishers in Study 2. From the legal perspective, lack of integration of Holistic and integrated approaches created a wicked problem for coastal governance, due to the tight connections between processing and harvesting. Similarly, fishing people recognized that governance paid little attention to the post-harvest and community aspects of the fisheries. Fishers associated viable small processing plants with healthy vibrant coastal communities yet pointed to trends of corporatization and a weakening processing sector in terms of diversity and viability. *Transparency* was present in laws, yet fishers commented that there was very little *Transparency* surrounding decision-making, representation, and regulatory standards. Finally, *Equity and equality* was not mentioned by many laws and policies and weakened by poor implementation of tenure and adjacency. Similarly, fishers found that lack of adjacency, whether through secure access to adjacent resources or foreign ownership of processing, seriously threatened implementation of the *Equity and equality* principle and rights to benefit from the fisheries. Moreover, inequitable sharing of resources between the inshore and offshore fleets negatively impacted respondents' perceptions of implementation of Equity and equality.

### **5.3 Opportunities for Blue Justice in NL**

#### 5.3.1 Small-Scale Fisheries in the Global North

Implementing the SSF Guidelines to support strong, viable small-scale fisheries in the Global North, in places like NL, can seem challenging, even intimidating, as a process of governance change. However, as Study 1 and 2 show, there is ample basis from which to begin the process of implementation. For instance, principles which have low coverage in laws and policies, representing substantial barriers for implementation, can support implementation of those which have ample coverage, representing opportunities.

#### 5.3.1.1 Tenure and gender equity and equality

Tenure, not well-covered by legal instruments, can be supported by *Gender equity and equality*, a principle that is well-covered, as an opportunity for establishing secure access for fishing communities and advancement of Blue Justice. In Ch. 2, it was found that challenges regarding gender in the Global North serve as a way to connect small-scale fisheries in this region of the world to the SSF Guidelines. Gender equity and equality is mentioned by DFO's policy on GBA+, as well as general legislation outlining the importance of this principle. However, it is unclear how DFO intends to implement this policy, or what GBA+ will mean for small-scale fisheries. This study indicates that strong representation of *Gender equity and equality* in the laws and policies, including in a fisheries-specific GBA+ policy, can play a key role in establishing tenure for small-scale fisheries—a major gap found in both Study 1 and 2. Tenure was not recognized by laws and policies in the form of continued access to quota or fishing areas, and fishers in Study 2 commented that there was no tenure regarding continuance of fishing licenses for small-scale communities, or fair access to fishing areas and quotas. GBA+ can provide one link between the present governing arrangements and tenure for small-scale fisheries people. Recognizing the disproportionate roles that women play in the small-scale fisheries can justify, through a GBA+ approach, prioritization of small-scale fisheries in the ocean space, i.e., enhancing access and tenure in small-scale fisheries relative to other ocean

industries (i.e., oil and gas, aquaculture). Such actions can address inequities between genders and sectors, exacerbated by laws and policies that fail to recognize those inequities, thus moving towards Blue Justice.

### 5.3.1.2 Shifting the aim from rationalization to recruitment

Strong emphasis on *viability* and *sustainability* in the laws and policies can help address recruitment challenges in small-scale fisheries. Implementation of strategies which improve recruitment in the small-scale fisheries serve as opportunities for advancing Blue Justice and key principles like *Social and economic viability* and *Economic, social and environmental sustainability* already outlined by the laws. This is important considering that recruitment poses one of the greatest threats to small-scale fisheries viability and sustainability (Neis et al. 2013, 2014; Sabau and van Zyll de Jong 2015; Thiessen and Davis 2008; Smith et al. 2014; Foley et al. 2016), and thus Blue Justice. Yet for a long time, provincial focus in small-scale fisheries governance has been on rationalization, which contributes to declining numbers of fishers. This research, including the literature review, document review and empirical component, provides some evidence that recruitment should now overtake rationalization as a concern which small-scale fisheries face. The overcapacity narrative, long behind rationalization strategies, may no longer be relevant for a small-scale fielet which is rapidly declining in number.

Recruitment is intimately tied to *sustainability* and *viability* of small-scale fisheries, two principles well-represented by the legal framework, indicating opportunities. However, these principles need attention to be operationalized on the ground, indicated by the experiences of small-scale fishing people in Study 2. Study 2 found that fishers perceived high entrance barriers based on the cost of licenses and challenges associated with professionalization, such as education, certification, sea-time, and income requirements. These contributed towards some respondents sorting Social and economic viability and sustainability as requiring action and attention, despite these principles being strongly emphasized by the laws and policies in Study 1. The values of the smaller boats as entry-points for young and new fishers can be supported by existing legal frameworks that emphasize *viability* and *sustainability*. Literature shows that rationalization and enterprise combining has changed the structure of the fisheries so that there are fewer smaller operations (Smith et al. 2014; Sabau and Boksh 2017). Nonetheless, it is these small operations which provide steppingstones for beginner or small investor-fishers, including youth and mothers, to enter the industry. It is smaller enterprises which are most conducive to starting up a fishing enterprise. Thus, addressing recruitment concerns requires direct and explicit support for small-scale sector viability-which means some enterprises staying smallso that there remain viable entry points into the fisheries. To summarize, *viability* and sustainability in the legal framework can be applied to addressing recruitment concerns through support for policies that do not encourage rationalization, but instead support small-scale viability through other means.

#### 5.3.1.3 Small-scale fisheries representation

Enhancing small-scale fisheries representation in fisheries management and governance through better implementation of *Consultation and participation*, a principle with strong legal basis, can support equitable benefits and improved outcomes for small-scale fishers, providing

opportunities for Blue Justice (Davis and Hanich 2022). Stronger implementation of the *Consultation and participation* principle on the ground can lead to increased alignment with *Equity and equality* and Blue Justice for small-scale fisheries people. Engagement with fishing people should be different from the model currently being practiced, which, as suggested by the findings of Study 1, focuses on operation and cost sharing. Direct engagement with fishing people can increase resilience in small-scale fisheries communities and governance adaptability (Song et al. 2018; Hurlbert and Gupta 2015; Lebel et al. 2010), and support Section 12 of the SSF Guidelines, concerning adequate representation, as well as *Consultation and participation* and *Transparency*, the two highest priority principles from the fishers' perspectives. Better integration of social and community perspectives into decision-making can contribute towards fishers' well-being, as well as implementation of bottom-up and interactive governance approaches which recognize the centrality of human actions to system resilience (Jentoft et al. 2010; Epstein et al. 2018).

### 5.3.1.4 Distinct legal recognition

Distinct recognition, absent from laws and policies, could advance alignment with principles such as *Equity and equality*, *Social and economic viability*, and *Economic, social and environmental sustainability* and in turn promote outcomes of Blue Justice for NL small-scale fisheries. Study 1 found that distinct legal recognition was lacking. Study 2 highlighted the need for distinct recognition of the small-scale fleet, beyond boat length limitations, which small-scale fishers viewed as discriminatory. Small-scale fishers, despite ample legal coverage and recognition, lacked secure access to fishing grounds, support for market improvements, and

support for social networks onshore, on which small-scale fisheries people rely. By overly focusing on boat length, legal instruments disregarded the community aspects of the small-scale fisheries, which are as Johnson (2006) explains, more important as a distinguishing factor. Recognition of the small-scale fisheries requires prioritizing the community aspects, which make them unique from the large-scale fisheries, in laws and policies. Distinct recognition on the basis of values (rather than boat length) could also support better *Social and economic viability* for the small-scale fleet, justifying more equitable quotas for small-scale fleets relative to larger boat fleets. Thus, one small step in legal recognition, recognizing the values and community-aspects of the small-scale fisheries, could mean one big step for implementation of the SSF Guidelines.

### 5.3.2 Blue Justice and "Uneconomic" Growth

Implementation of Blue Justice in the forthcoming Blue Economy will require exploring alternative routes to promoting *economic viability*, which do not conflict with *Equity and equality*, *Social viability* and *Social sustainability*. Considering that Study 1 indicates lack of distinct legal protections and tenure, the Blue Economy has the potential to create a "growing squeeze" for small-scale fisheries communities, which means that small-scale fisheries are pushed out of the ocean space as a result of economic development of other industries (Cohen et al. 2019: 4). Economic growth objectives, which have, according to fishing people, contributed to degrading social networks and prioritization of other ocean industries in the past, could further threaten small-scale fisheries people in a future Blue Economy. Narratives dominating the provincial discourse on small-scale fisheries, including overcapacity and economic efficiency (Walsh 2011, i.e., Cashin 2011; Clift 2006), seem to align well with a Blue Economy stressing

economic growth. However, decisions guided by these narratives have proved problematic for small-scale fisheries people. Decisions guided by economic efficiency have paved the way for a corporatized processing sector, which has created challenges in obtaining a fair price for fishing people (Andrews et al. 2022). For advancement of Blue Justice, other principles such as *Equity and equality, Holistic and integrated approaches* and *Social sustainability*, focused on communities and not economic growth, need to be prioritized in a Blue Economy.

### 5.3.2.1 Blue Justice for coastal communities

Advancing alignment between principles in a Blue Economy and principles in the SSF Guidelines is one such route towards ensuring that there is justice for small-scale fisheries people in a Blue Economy. However, stronger attention to principles such as *Equity and equality*, *Social sustainability*, *Holistic and integrated approaches* and *Social viability* has the potential to support a range of sectors and industries beyond only small-scale fisheries. For instance, improving markets, value chains, and local access can help all fisheries sectors, as well as local people who need access to affordable food. Supporting secure access for small-scale fishers can also protect important coastal environments from degradation, key for tourism and the wellbeing of coastal residents. Protecting small-scale fisheries access by limiting growth of industrial aquaculture and salmon farming in NL can support and promote small-scale aquaculture operations, which require clean water and healthy environments.

Increased alignment with the SSF Guidelines in a Blue Economy is not simply a way to protect small-scale fishing interests. Rather, it can be considered as a way to protect communities and

individuals living on Canada's coasts—those who a Blue Economy intends to help. Tight connections between harvest and post-harvest identified by this research, as well as the household aspects of the fisheries and role of women, indicate that there is more to supporting the fisheries than considering only what happens on the water. The same will be true of increasing alignment with the SSF Guidelines, which can help more than just those out on the water fishing. Ensuring small-scale fisheries access to adjacent coastal spaces can support community benefits by providing space for diverse fisheries people including women and young people and creating strong social networks which keep rural communities and local economies vibrant.

### 5.3.2.2 Transdisciplinary governance

Transdisciplinary governance, which entails being inclusive of small-scale fishing people in decision-making, may greatly contribute to carrying out Blue Justice in a Blue Economy. Transdisciplinary governance has the potential to restructure governance arrangements for improved governability, secure access, and equity (Idrobo et al. 2022). Canada's Blue Economy strategy can be in alignment with Blue Justice through transdisciplinary governance which respects small-scale fisheries people through the formulation, planning and application stages of the strategy. Integration of fishers' knowledge is an essential ingredient to co-creating visions for coastal spaces with diverse ways of being and knowing at the core of sustainable and just development. Decision-making and planning must center small-scale fisheries perspectives on what a Blue Economy means to them, as well as the knowledge of social science scholars' who have worked tirelessly to comprehend these systems. Transdisciplinary methods in planning

forthcoming strategies like the Blue Economy can contribute to strengthened coastal community structures and livelihoods, increased sustainability of ocean resources, and improved well-being of small-scale fisheries peoples.

#### 5.3.3 Interactive Governance for Blue Justice

Using interactive governance theory has helped advance knowledge of implementation of SSF Guidelines principles, showing how increased alignment between various commitments and objectives can support protections for small-scale fishing people. The lens of interactive governance theory was useful in both guiding the methods and analysis, as well as posing questions for future research and policy planning. For instance, which principles are driving plans in a Blue Economy and their third order alignment with SSF Guidelines principles? How are instruments in the second order being enacted through plans in a Blue Economy strategy? And, what are the first order outcomes that fishers are experiencing as a result of the Blue Economy strategy, which can guide future decision-making? In accordance with interactive governance theory, implementation of the SSF Guidelines will require alignment and collaboration among frameworks, departments and jurisdictions, i.e., federal and provincial governments, regional municipalities, and communities. Such integration can create improved governability outcomes (Song and Chuenpagdee 2015; Epstein et al. 2015). Collaboration and alignment will be necessary if small-scale fisheries protections stated in the laws and policies can become enacted on the ground. Raising the overall quality of interactions can improve inputs in decision-making, as well as governing responsiveness. Thus, interactive governance theory implies that implementation of the SSF Guidelines will require more than discussion and
awareness of the gaps and opportunities found in this study. Rather, implementation requires that varying governing institutions, including local communities and fishing people, work together from the formulation, envisioning and planning process to the enaction of cohesive changes for Blue Justice.

#### 5.4 Blue Justice for Small-Scale Fisheries and Beyond

This thesis connected the need for small-scale fisheries protections, as outlined by the SSF Guidelines, to small-scale fisheries in the Global North, in places like NL. This thesis identified how the SSF Guidelines principles applied in the NL context, the gaps in legal and policy alignment with those principles (Study 1), and various interpretations and significances of those principles according to fishers (Study 2). This thesis explicitly linked plans in a Blue Economy to the notion of Blue Justice, through application of the SSF Guidelines as a way to guide ocean development. Small-scale fishers in Study 2 experienced struggles that are directly related to the gaps in alignment in Study 1. Thus, implementation of the SSF Guidelines in laws and policies is crucial for NL small-scale fisheries rights, protections, and guarantees on the ground. Advancing alignment between laws and policies and the SSF Guidelines is important for Blue Justice, which can increase fishers' access and inclusion in decision-making, as well as small-scale fishers' sense of autonomy and well-being. Increasing alignment for Blue Justice in a Blue Economy, using transdisciplinary governance, will become increasingly important, not just to protect the small-scale fishing sector, but also social networks, coastal habitats, human well-being, and other small-scale industries, for instance small-scale aquaculture and fish processing.

131

# **Chapter 6: Conclusion**

This research has taken a journey through the three orders—first order practices, second order laws and policies, and third order principles. In study 1, this research explored how to better understand interactions between second order Canadian laws and policies and implementation of the SSF Guidelines principles in the third order. In Study 2, this research explored how principles in the third order relate to lived experiences of fishers in the first order. Study 1 found ample legal coverage of the SSF Guidelines in laws and policies with significant room to grow in areas such as tenure and access, distinct legal recognition, small-scale fisheries representation, and equitable quota sharing, relating to principles such as Equity and equality, Gender equity and equality, and Holistic and integrated approaches, among others. Study 2 found that fishers were experiencing key gaps, not highlighted in Study 1, relating to Consultation and participation, Non-discrimination, and Human rights and dignity. There were also issues found with poor recruitment of fishers (viability), lack of attention towards the post-harvest sector (Holistic and *integrated approaches*), lack of attention towards fisher well-being and communities (*Holistic* and integrated approaches), and lack of protections for small-scale fishing sectors against infringement from other industries (tenure, *Equity and equality*, sustainability)—findings which are consistent with Study 1.

Results from Study 1 and 2 were synthesized in Chapter 5 for the discussion about barriers and opportunities, which can be found in pathways for implementing the SSF Guidelines. First, distinct legal recognition for small-scale fisheries can create enabling conditions for support of an array of small-scale fisheries principles including *Human rights and dignity, Consultation and* 

132

participation and Equity and equality. Also, recognizing and supporting the social and community values of the small-scale fisheries has the potential to lead to better recruitment, improved market conditions, and secure access to ocean space and resources. DFO can broaden interpretations of *Consultation and participation* to increase the quality of interactions with fishing people, as well as *Transparency* between the government and fishers. More equitable quota arrangements can support the small-scale sector, thus providing increased pathways to entry into the fishing industry for youth, women, and new fishers. Measures to improve implementation of *Equity and equality* also have the potential to support *Environmental* sustainability by shifting governance focus from offshore quotas to sustainable and viable smallscale sectors. DFO gender-based policies like GBA+ can increase recognition of the central roles that women play in the small-scale fisheries and be used as justification for improving tenure of small-scale fishing sectors. Integration of the post-harvest sector in governance of the harvest sector can improve market value of fish species, thus increasing well-being of fishers and sustainability of resources. Overall, fisher knowledge must be integrated into and respected on the meta-governance level, which means that fisher participation occurs in more ways than operation, cost sharing, and decisions surrounding quotas and seasonality. Fisher participation in meta-governance means that fishers are centrally involved in the envisioning stages of ocean development—value-, image- and principle- formation, to craft what ideal coastal spaces look like now and in the future.

#### **6.1 Study Limitations**

This study has limitations, much having to do with interpretation of language between contexts for both Study 1 and 2. In Study 1, legal language used in the laws and policies did not always match language in the SSF Guidelines principles and objectives. For this reason, there was a level of interpretation needed by myself, the researcher, to understand alignment between the second order laws and policies and third order principles from the SSF Guidelines document. The language in laws and policies was sometimes insufficient to determine coverage of the SSF Guidelines principles. Furthermore, the Canadian government's interpretation of the principles may have differed from the SSF Guidelines. Finally, document reviews are limiting because they cannot determine what is happening in practice. What is stated in the laws and policies is not necessarily reflective of what occurs on the ground.

Part of this gap was filled by Study 2, yet this study also had limitations. Study 2 was only conducted in three regions of NL, all in Newfoundland (not Labrador) and with 38 fishers included in the empirical data who may not capture the opinions and perspectives of the entire fisheries population in the province. Study 2, like Study 1, had limitations concerning interpretation of language. Definitions of the principles on the cards were adapted and rephrased from the definitions on the SSF Guidelines to make them shorter and easier to sort in the game (see Appendix II). Fishers' interpretations of the principles varied between individuals, making it impossible to completely validate the results when comparing across sorts (however these varying interpretations were acknowledged throughout the analysis). There were limitations in recruitment, with the fieldwork having to be conducted in short time spurts over the winter due

134

to Covid restrictions. Thus, there was an unequal number of participants interviewed from each of the groups, which may impact the quantitative comparisons across groups, as well as the qualitative data and analysis. Furthermore, Study 2 focused only on fishers, but could be expanded to look at other actors and sectors in coastal communities to better account for diverse perspectives. Community leaders, such as elected officials and business owners, those involved in education, and post- and pre-harvest actors in small-scale fisheries could play key roles in implementing the SSF Guidelines and understanding how implementation could occur, and would thus be important to speak to for a project like this one. Such an approach would mirror the holistic approach to fisheries governance that this paper calls for, recognizing small-scale fisheries as not just happening on the water, but also on shore. This approach could encompass more components of the fishery and diverse actors involved in the fishery within the empirical data. Moreover, interviewing those beyond only fish harvesters would enable higher participation of women in the study, who are heavily involved in the fisheries but underrepresented by a sample of only fish harvesters—mostly captains—addressing thus the gender imbalance.

#### **6.2 Future Research**

This study focused on how the SSF Guidelines fit into the NL, Canadian context. It will be important for future research to delve into certain principles on a more granular level, such as *Gender equity and equality*, for further understanding of alignment in these areas and for advancement of Blue Justice. For instance, research might further explore *Gender equity and equality* in relationship to advancing tenure for small-scale fisheries. This research could assess the role of women in fisheries relative to other ocean industries, for instance industrial aquaculture and oil and gas. Future research could seek to determine to what extent there is institutional capacity in Atlantic Canada to implement the proposed changes for advancing alignment, or what needs to happen to increase that institutional capacity. Future research could explore ways to integrate harvest and post-harvest governance to improve market capacity for small-scale fishing people and overall governability of the fisheries through enhancing cohesiveness between levels of authority. Finally, research could continue to explore, as the strategy unfolds, ways to center the Blue Economy on Blue Justice for small-scale fishing people.

#### 6.3 Final Reflections: Blue Justice for Small-Scale Fisheries!

This research has shown that the SSF Guidelines are highly relevant to the NL case study, suggesting they also have relevance in Canada and the Global North more broadly. Given the roles of small-scale fisheries in these contexts and their marginalization in the ocean space, economic growth cannot be the only factor guiding Canada's Blue Economy Strategy. The social and community components, which make small-scale coastal livelihoods distinct, need to be properly considered and prioritized. Using the SSF Guidelines as a guiding document for an unfolding Blue Economy strategy can be a primary way of ensuring social and community principles, such as *equity, viability* and *holistic approaches*, are considered.

Canadian small-scale fisheries are grounded in family and community structures and contribute to the resilience, autonomy, and identity of local fishing people (Neis et al. 2014). Increased

alignment with the SSF Guidelines can support small-scale fisheries grounded in communities, ensuring continued benefits and access for fishing people and advancement of Blue Justice in Canada. Fishers in this study recalled many challenges including lack of secure access to adjacent resources, lack of recruitment of young people into the fisheries, struggles to become recognized as viable and efficient by governmental bodies, and conservation challenges posed by other industries and the threats of climate change. However, implementation of key principles into NL fisheries governance can increase small-scale fisheries visibility and recognition, as well as protections and rights, supporting fisheries people's well-being and validating small-scale fisheries struggles.

This thesis was written between fishing trips, and from the perspective of a fishing person and researcher, through the transdisciplinary lens. It was the input and inspiration of fishing people both in Newfoundland, and from my home fishing communities in Maine and Alaska, that resulted in the initial drive to conduct this research and formulation of the research questions and research instrument. This thesis was not only an exploration of the topics laid out in each of the chapters, but also a personal exploration of how institutions can support 'a good life' for coastal people. I discovered that human well-being is at the center of Blue Justice issues and the reason that implementation of all the SSF Guidelines principles is vital. As a fishing person myself, I can understand that problems in the fisheries are not ethereal or external, but they are experienced—in cold hands, on dark mornings, in fishers' anxious thoughts and sore muscles. They are lived on rocky coasts, at the local bank, at the breakfast table, at the kid's school, in the gear workshop, and on the fishing boat. They are seen, felt, and perceived by more than just fishing people, but entire fishing communities. Implementation of the SSF Guidelines requires

137

hard work and knowledge, but also connecting principles and the importance of social justice for coastal peoples to human livelihoods. It is this collaboration and understanding between various perspectives—small-scale fisheries people, researchers and government policymakers—which can support and promote a way of being on Canada's coasts, which people around the world, and all kinds of industries, can look to for examples of diverse, sustainable small-scale livelihoods.

#### References

Acheson, J. M. (1988). The lobster gangs of Maine. University Press of New England.

- Allen, S., Power, N., Neis, B., Foley, P., and Johnson, J. P. (2018). Taking Stock of Recruitment, Training, and Retention Literature in Newfoundland and Labrador Fishery from 1980s to Present. Ocean Frontier Institute.
- Allison, E. H., and Ellis, F. (2001). The livelihoods approach and management of small-scale fisheries. *Marine Policy*, 25(5), 377–388. <u>https://doi.org/10.1016/S0308-597X(01)00023-</u> <u>9</u>
- Amadu, I., Armah, F. A., and Aheto, D. W. (2021). Assessing Livelihood Resilience of Artisanal Fisherfolk to the Decline in Small-Scale Fisheries in Ghana. *Sustainability*, *13*(18), 10404. <u>https://doi.org/10.3390/su131810404</u>
- Andrews, E. J., Wolfe, S., Nayak, P. K., and Armitage, D. (2021). Coastal fishers livelihood behaviors and their psychosocial explanations: Implications for fisheries governance in a changing world. *Frontiers in Marine Science*, 8.

https://doi.org/10.3389/fmars.2021.634484.

Andrews, E. J., Daly, J., El Halimi, M., and Chuenpagdee, R. (2022). Governance for Blue Justice: Examining Struggles and Contradictions in Atlantic Canada's Small-Scale Fisheries. In S. Jentoft, R. Chuenpagdee, A. Bugeja Said, & M. Isaacs (Eds.), *Blue Justice* (Vol. 26, pp. 75–95). Springer International Publishing.

https://doi.org/10.1007/978-3-030-89624-9\_5

Arkema, K. K., Abramson, S. C., and Dewsbury, B. M. (2006). Marine ecosystem-based management: From characterization to implementation. *Frontiers in Ecology and the* 

Environment, 4(10), 525-532. https://doi.org/10.1890/1540-

#### <u>9295(2006)4[525:MEMFCT]2.0.CO;2</u>

- Armitage, D., de Loë, R., and Plummer, R. (2012). Environmental governance and its implications for conservation practice: Environmental governance. *Conservation Letters*, 5(4), 245–255. <u>https://doi.org/10.1111/j.1755-263X.2012.00238.x</u>
- Ayilu, R. K., Fabinyi, M., and Barclay, K. (2022). Small-scale fisheries in the blue economy: Review of scholarly papers and multilateral documents. *Ocean & Coastal Management*, 216, 105982. <u>https://doi.org/10.1016/j.ocecoaman.2021.105982</u>
- Barber, D. G., Babb, D. G., Ehn, J. K., Chan, W., Matthes, L., Dalman, L. A., Campbell, Y.,
  Harasyn, M. L., Firoozy, N., Theriault, N., Lukovich, J. V., Zagon, T., Papakyriakou, T.,
  Capelle, D. W., Forest, A., & Gariepy, A. (2018). Increasing Mobility of High Arctic Sea
  Ice Increases Marine Hazards Off the East Coast of Newfoundland. *Geophysical Research Letters*, 45(5), 2370–2379. <u>https://doi.org/10.1002/2017GL076587</u>
- Barragán-Paladines, M. J., Chuenpagdee, R., Franz, N., and Jentoft, S. (Eds.). (2017). *The Small-Scale Fisheries Guidelines: Global Implementation* (1st ed. 2017). Springer International Publishing : Imprint: Springer. <u>https://doi.org/10.1007/978-3-319-55074-9</u>
- Baruah, B., and Biskupski-Mujanovic, S. (2021). Navigating sticky floors and glass ceilings:
  Barriers and opportunities for women's employment in natural resources industries in
  Canada. *Natural Resources Forum*, 45(2), 183–205. <u>https://doi.org/10.1111/1477-</u>
  8947.12216
- Bavinck, M., Jentoft, S., and Scholtens, J. (2018). Fisheries as social struggle: A reinvigorated social science research agenda. *Marine Policy*, *94*, 46–52.

https://doi.org/10.1016/j.marpol.2018.04.026

- Bavington, D., Grzetic, B., and Neis, B. (2004). The feminist political ecology of fishing down:
  reflections from Newfoundland and Labrador. *Studies in Political Economy*, 73(1), 159-182.
- Belbin, V. P. S. (2010). Regional governance and the Newfoundland fishery (Doctoral dissertation, Memorial University of Newfoundland).
- Bennett, N. J., Calò, A., Di Franco, A., Niccolini, F., Marzo, D., Domina, I., Dimitriadis, C.,
  Sobrado, F., Santoni, M.-C., Charbonnel, E., Trujillo, M., Garcia-Charton, J., Seddiki, L.,
  Cappanera, V., Grbin, J., Kastelic, L., Milazzo, M., and Guidetti, P. (2020). Social equity
  and marine protected areas: Perceptions of small-scale fishermen in the Mediterranean
  Sea. *Biological Conservation*, 244, 108531. <u>https://doi.org/10.1016/j.biocon.2020.108531</u>
- Bennett, N. J., Blythe, J., White, C. S., and Campero, C. (2021). Blue growth and blue justice: Ten risks and solutions for the ocean economy. *Marine Policy*, *125*, 104387
- Béné, C. (2003). When Fishery Rhymes with Poverty: A First Step Beyond the Old Paradigm on Poverty in Small-Scale Fisheries. *World Development*, 31(6), 949–975. <u>https://doi.org/10.1016/S0305-750X(03)00045-7</u>
- Béné, C., Macfadyen, G., Béné, C., Macfadyen, G., and Allison, E. H. (2007). Increasing the contribution of small-scale fisheries to poverty alleviation and food security. Food and Agriculture Organization of the United Nations.
- Béné, C. (2009). Are Fishers Poor or Vulnerable? Assessing Economic Vulnerability in Small-Scale Fishing Communities. *The Journal of Development Studies*, 45(6), 911–933. <u>https://doi.org/10.1080/00220380902807395</u>
- Bryant S, Martin B (1996) Ancient Rights: The Protected Fishing Area of Petty Harbour-Maddox Cove. Protected Areas Association of NL.

- Byron, R. (Ed.). (2003). *Retrenchment and regeneration in rural Newfoundland*. University of Toronto Press.
- Cahill, M., Canada, Department of Fisheries and Oceans, Communications Directorate, Canada,
   & Task Force on Incomes and Adjustment in the Atlantic Fishery. (1993). Women in the
   Newfoundland fishery. Supply and Services Canada.

Canada Gazette, Part II, Volume 154, Number 25 (2020) <u>https://gazette.gc.ca/rp-pr/p2/2020/2020-12-09/html/sor-dors246-eng.html</u>

- Carothers, C. (2015). Fisheries privatization, social transitions, and well-being in Kodiak, Alaska. *Marine Policy*, *61*, 313–322. <u>https://doi.org/10.1016/j.marpol.2014.11.019</u>
- Carruthers, E. H., Parlee, C. E., Keenan, R., & Foley, P. (2019). Onshore benefits from fishing: Tracking value from the northern shrimp fishery to communities in Newfoundland and Labrador. *Marine Policy*, *103*, 130–137. <u>https://doi.org/10.1016/j.marpol.2019.02.034</u>
- Cashin, R. (2005). *Report of the Chairman RMS Review Committee*. Government of Newfoundland and Labrador.
- CBC News. (April 6, 2018). 'Protected' marine area open to oil, gas exploration.
- Charles, A. T. (1989). Bio-socio-economic dynamics and multidisciplinary models in small-scale fisheries research.
- Chuenpagdee, R. (2011a). Interactive governance for marine conservation: An illustration. Bulletin of Marine Science, 87(2), 197–211. https://doi.org/10.5343/bms.2010.1061
- Chuenpagdee, R. (Ed.). (2011b). *World small-scale fisheries: Contemporary visions*. Eburon Academic Publishers.
- Chuenpagdee, R., Olson, K., Bishop, D., Brauer, M., Kereži, V., Plaan, J., Pötter, S., Rogers, V., and Sabau, G. (2017). The Step Zero for Implementing the Small-Scale Fisheries

Guidelines in Newfoundland and Labrador, Canada. In S. Jentoft, R. Chuenpagdee, M. J. Barragán-Paladines, & N. Franz (Eds.), *The Small-Scale Fisheries Guidelines* (Vol. 14, pp. 495–517). Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-55074-9\_23</u>

- Chuenpagdee, R., Jentoft, S., and Jin, J. (2019). *Transdisciplinarity for small-scale fisheries* governance : analysis and practice (Ratana Chuenpagdee & S. Jentoft, Eds.). Springer Nature Switzerland AG.
- Chuenpagdee, R. (2020) Blue justice for small-scale fisheries: What, why and how. In: Kerezi,V., Kinga Pietruska, D., & Chuenpagdee, R. (Eds.) Blue Justice For Small-ScaleFisheries: A Global Scan. TBTI Global Publication Series, St. John's, NL, Canada.
- Clarke, M. (2003). 5. The Professionalization of Inshore Fishers. In R. Byron (Ed.), *Retrenchment and Regeneration in Rural Newfoundland*. University of Toronto Press. pp. 134-157. https://doi.org/10.3138/9781442679320-007
- Clift, T. 2011. Newfoundland and Labrador: Fishing Industry Rationalization and Restructuring. Report of the Independent Chair: MOU Steering Committee. St. John's, NL: Department of Fisheries and Aquaculture. <u>http://www.fishaq.gov.nl.ca/pub-lications/mou.pdf</u>.
- Cohen, P. J., Allison, E. H., Andrew, N. L., Cinner, J., Evans, L. S., Fabinyi, M., Garces, L. R.,
  Hall, S. J., Hicks, C. C., Hughes, T. P., Jentoft, S., Mills, D. J., Masu, R., Mbaru, E. K.,
  and Ratner, B. D. (2019). Securing a just space for small-scale fisheries in the blue
  economy. *Frontiers in Marine Science*, *6*, 171. https://doi.org/10.3389/fmars.2019.00171
- Cook, K., Rosenbaum, K. L., and Poulani, F. (2021). *Building resilience to climate change and disaster risks for small-scale fisheries communities*. FAO.

https://doi.org/10.4060/cb7616en

- Coulthard, S., Johnson, D., and McGregor, J. A. (2011). Poverty, sustainability and human wellbeing: A social wellbeing approach to the global fisheries crisis. *Global Environmental Change*, *21*(2), 453–463. <u>https://doi.org/10.1016/j.gloenvcha.2011.01.003</u>
- Daly, H. E., and Farley, J. (2011). *Ecological economics: Principles and applications*. Island press.
- Daly, J., and Chuenpagdee, R. (2020). Facing an uncertain future: A prospective analysis of trade policy on coastal communities in northwest Newfoundland. *Marine Policy*, *117*, 103890.
- Daly, J., Knott, C., Keogh, P., and Singh, G. G. (2021). Changing climates in a blue economy: Assessing the climate-responsiveness of Canadian fisheries and oceans policy. *Marine Policy*, 131, 104623. https://doi.org/10.1016/j.marpol.2021.104623
- Davis, D. L. (1986a). The meaning of menopause in a newfoundland fishing village. *Culture, Medicine and Psychiatry*, *10*(1), 73–94. <u>https://doi.org/10.1007/BF00053263</u>
- Davis, D. L. (1986b). Occupational Community and Fishermen's Wives in a Newfoundland Fishing Village. Anthropological Quarterly, 59(3), 129. <u>https://doi.org/10.2307/3317199</u>
- Davis, R., Whalen, J., and Neis, B. (2006). From Orders to Borders: Toward a Sustainable Comanaged Lobster Fishery in Bonavista Bay, Newfoundland. *Human Ecology*, 34(6), 851–867. <u>https://doi.org/10.1007/s10745-006-9032-2</u>
- Davis, R. A., and Hanich, Q. (2022). Transparency in fisheries conservation and management measures. *Marine Policy*, *136*, 104088. <u>https://doi.org/10.1016/j.marpol.2020.104088</u>
- Davis, R. (2015). 'All in': Snow crab, capitalization, and the future of small-scale fisheries in Newfoundland. *Marine Policy*, 61, 323–330. <u>https://doi.org/10.1016/j.marpol.2015.04.008</u>

Daw, T. M., Cinner, J. E., McClanahan, T. R., Brown, K., Stead, S. M., Graham, N. A. J., & Maina, J. (2012). To Fish or Not to Fish: Factors at Multiple Scales Affecting Artisanal Fishers' Readiness to Exit a Declining Fishery. *PLoS ONE*, 7(2), e31460.

https://doi.org/10.1371/journal.pone.0031460

- De Young, C., Charles, A., & Hjort, A. (2008). Human dimensions of the ecosystem approach to fisheries: An overview of context, concept, tools and methods. FAO. Rome, Italy.
  - DFO (Department of Fisheries and Oceans, Canada). (2004). A policy framework for the management of fisheries on Canada's Atlantic coast. Atlantic Fisheries Policy Review. Ottawa, CA.
  - DFO. (2019a). Commercial Fisheries Licensing Policy for Newfoundland and Labrador. Ottawa, CA.
  - DFO (2019b). Snow Crab Newfoundland and Labrador Region. Integrated Fisheries Management Plans. <u>https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/snow-crab-neige/2019/index-eng.html</u>.
  - DFO (2019c). Policy on Gender-Based Analysis Plus (GBA+): Applying an Intersectional Approach to Foster Inclusion and Address Inequities. Ottawa, CA.
  - DFO. (2021a). "Blue Economy Strategy Engagement Paper." <u>https://waves-vagues.dfo-mpo.gc.ca/Library/40946721.pdf</u>
  - DFO. (2021b). Commercial Fisheries Licensing Policy for Eastern Canada. Ottawa, CA.
  - DFO. (2021c). Mandate and Role. Retrieved December 11, 2021, from <u>https://www.dfo-mpo.gc.ca/about-notre-sujet/mandate-mandat-eng.htm</u>

DFO. (2021d). The Current – managing Oceans Act MPAs now, for the future – summary report 2021. Retrieved April 20, 2022, from <u>https://www.dfo-</u> mpo.gc.ca/oceans/publications/current-courant/2021/report-rapport-eng.html

DFO. (2021e). Reaching Canada's marine conservation targets. Retrieved March 3, 2022, from <a href="https://www.dfo-mpo.gc.ca/oceans/conservation/plan/index-eng.html">https://www.dfo-mpo.gc.ca/oceans/conservation/plan/index-eng.html</a>

- DFO. (2021f). Canada's Fisheries Funds. https://www.dfo-mpo.gc.ca/fisheriespeches/initiatives/index-eng.html
- DFO. (2022a). Engaging on Canada's Blue Economy Strategy: What We Heard. Retrieved April 4, 2022, from <u>https://waves-vagues.dfo-mpo.gc.ca/Library/41030503.pdf</u>.
- DFO. (2022b) Landings and landed value by species: NL region preliminary data subject to revision. <u>https://www.inter.dfo-</u>

mpo.gc.ca/publications/reports\_rapports/Land\_All\_Vessels\_Debarquer\_Tous\_Les\_Navir es\_2021\_eng.htm

DFO. (2022c). 2022 Snow Crab Fishery Newfoundland and Labrador. Retrieved August 1, 2022, from <u>https://www.dfo-mpo.gc.ca/fisheries-peches/decisions/fm-2022-gp/atl-06-eng.html</u>.

Dean-Simmons, B. (2022). Fishing boat owners in N.L. deliver 'loud and clear' message to DFO; scuttle those vessel length restrictions. Saltwire. <u>https://www.saltwire.com/atlantic-canada/business/fishing-boat-owners-in-nl-deliver-loud-and-clear-message-to-dfo-scuttle-those-vessel-length-restrictions-100701540/</u>.

- Dietz, T., Ostrom, E., and Stern, P. C. (2003). The Struggle to Govern the Commons. *Science*, *302*(5652), 1907–1912. <u>https://doi.org/10.1126/science.1091015</u>
- Donkersloot, R., Black, J. C., Carothers, C., Ringer, D., Justin, W., Clay, P. M., Poe, M. R., Gavenus, E. R., Voinot-Baron, W., Stevens, C., Williams, M., Raymond-Yakoubian, J.,

Christiansen, F., Breslow, S. J., Langdon, S. J., Coleman, J. M., and Clark, S. J. (2020). Assessing the sustainability and equity of Alaska salmon fisheries through a well-being framework. *Ecology and Society*, *25*(2), art18. <u>https://doi.org/10.5751/ES-11549-250218</u>

- Engen, S., Hausner, V. H., Gurney, G. G., Broderstad, E. G., Keller, R., Lundberg, A. K.,
  Murguzur, F. J. A., Salminen, E., Raymond, C. M., Falk-Andersson, J., and Fauchald, P. (2021). Blue justice: A survey for eliciting perceptions of environmental justice among coastal planners' and small-scale fishers in Northern-Norway. *PLOS ONE*, *16*(5), e0251467. <u>https://doi.org/10.1371/journal.pone.0251467</u>
- Ennis, G. P. (2011). Closed areas as a conservation strategy in the Newfoundland lobster fishery. *Biodiversity*, *12*(1), 11–20. <u>https://doi.org/10.1080/14888386.2011.574427</u>
- Epstein, G., Andrews, E., Armitage, D., Foley, P., Pittman, J., and Brushett, R. (2018). Human dimensions of ecosystem-based management: Lessons in managing trade-offs from the Northern Shrimp Fishery in Northern Peninsula, Newfoundland. *Marine Policy*, 97, 10– 17. <u>https://doi.org/10.1016/j.marpol.2018.08.018</u>
- FAO (Food and Agricultural Organization). (2015). Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. FAO, Rome.
- FAO. (2020). Small-scale and artisanal fisheries: Progress on implementing the SSF Guidelines since the thirty- third session of COFI in 2018. Committee on Fisheries, Rome, Italy.
- FAO, Duke University and World Fish. (2021). Illuminating hidden harvests: The contribution of small-scale fisheries to sustainable development. FAO. <u>https://www.fao.org/3/cb2879en/cb2879en.pdf</u>.

FAO. (2022). A policy and legal diagnostic tool for sustainable small-scale fisheries. https://www.fao.org/3/cb8234en/cb8234en.pdf.

FFA (Department of Fisheries, Forestry and Agriculture, NL). (April 12, 2007). Renewing the Newfoundland and Labrador Fishing Industry. St. John's, NL.

https://www.releases.gov.nl.ca/releases/2007/fishaq/0412n03.htm.

- FFA. 2020. "The Fishing Industry and COVID-19 Proposal for Federal Industry Supports," <u>https://www.fishaq.gov.nl.ca/fisheries/pdf/The\_Fishing\_Industry\_and\_COVID-</u> <u>Industry\_Proposal.pdf</u>
- FFAW-Unifor. (Fish, Food and Allied Workers Union) (2021a). The history of the owneroperator and fleet separation policies: Cornerstones to protecting the independence of fish harvesters. <u>https://FFAW-Unifor.ca/the-latest/news/history-owner-operator-fleet-</u> <u>separation-policies-cornerstones-protecting-independence-fish-harvesters/</u>.
- FFAW-Unifor. (2021b) For now and for the future: Protecting our rural communities. <u>https://FFAW-Unifor.ca/app/uploads/2021/08/FFAW-Unifor-For-Now-and-For-the-</u> <u>Future.pdf</u>
- FFAW-Unifor. (2022) Industrial Retail Offshore. <u>https://FFAW-Unifor.ca/sectors/industrial-retail-offshore/</u>
- 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. <u>https://doi.org/10.1080/08941920.2015.1089611</u>
- Foley, P., and Mather, C. (2019). Ocean grabbing, terraqueous territoriality and social development. *Territory, Politics, Governance*, 7(3), 297–315. <u>https://doi.org/10.1080/21622671.2018.1442245</u>

- Frost, R. (2021). Normative beliefs and economic life: A case study of the fishing industry in two communities in rural newfoundland. *Marine Policy*, *127*, 104423. https://doi.org/10.1016/j.marpol.2021.104423
- Garrett, A., MacMullen, P., and Symes, D. (2012). Fisheries as learning systems: Interactive learning as the basis for improved decision making. *Fisheries Research*, 127–128, 182– 187. <u>https://doi.org/10.1016/j.fishres.2012.01.014</u>
- Ganter, S., Crawford, T., Irwin, C., Robichaud, V., DeMaio-Sukic, A., Wang, J., Andrews, J., and Larocque, H. (2021). *Canada's oceans and the economic contribution of marine sectors*. Government of Canada. <u>https://www150.statcan.gc.ca/n1/en/pub/16-002-</u> x/2021001/article/00001-eng.pdf?st=YdN6pnb\_
- Garland, M., Axon, S., Graziano, M., Morrissey, J., and Heidkamp, C. P. (2019). The blue economy: Identifying geographic concepts and sensitivities. *Geography Compass*. <u>https://doi.org/10.1111/gec3.12445</u>
- Government of Prince Edward Island. (2020). Gender inclusion in agriculture, aquaculture and fisheries in Prince Edward Island, Canada: Results from a survey and interviews.Charlottetown, PE: Strategic Policy and Evaluation Division, Department of Agriculture and Land & Department of Fisheries and Communities."
- Gustavsson, M., Frangoudes, K., Lindström, L., Álvarez Burgos, M. C., and de la Torre-Castro, M. (2021). Gender and Blue Justice in small-scale fisheries governance. *Marine Policy*, *133*, 104743. <u>https://doi.org/10.1016/j.marpol.2021.104743</u>
- Hamilton, L. C., and Butler, M. J. (2001). Outport Adaptations: Social Indicators through Newfoundland's Cod Crisis. *Human Ecology Review*, 8(2), 1–11. JSTOR.

- Hilborn, R., Maguire, J.-J., Parma, A. M., and Rosenberg, A. A. (2001). The Precautionary
  Approach and risk management: Can they increase the probability of successes in fishery
  management? *Canadian Journal of Fisheries and Aquatic Sciences*, 58(1), 99–107.
  https://doi.org/10.1139/f00-225
- Hurlbert, M., and Gupta, J. (2015). The split ladder of participation: A diagnostic, strategic, and evaluation tool to assess when participation is necessary. *Environmental Science & Policy*, 50, 100–113. <u>https://doi.org/10.1016/j.envsci.2015.01.011</u>
- Jentoft, S., and Chuenpagdee, R. (2009). Fisheries and coastal governance as a wicked problem. *Marine Policy*, *33*(4), 553–560. <u>https://doi.org/10.1016/j.marpol.2008.12.002</u>
- Jentoft, S., Chuenpagdee, R., Bundy, A., and Mahon, R. (2010). Pyramids and roses: Alternative images for the governance of fisheries systems. *Marine Policy*, 34(6), 1315–1321. <u>https://doi.org/10.1016/j.marpol.2010.06.004</u>
- Jentoft, S. (2014). Walking the talk: Implementing the international voluntary guidelines for securing sustainable small-scale fisheries. *Maritime Studies*, 13(1), 16. <u>https://doi.org/10.1186/s40152-014-0016-3</u>
- Jentoft, S., and Bavinck, M. (2014). Interactive governance for sustainable fisheries: Dealing with legal pluralism. *Current Opinion in Environmental Sustainability*, 11, 71–77. https://doi.org/10.1016/j.cosust.2014.10.005
- Jentoft, S. (2020). Life above water: Small-scale fisheries as a human experience. *Maritime Studies*, *19*(4), 389–397. <u>https://doi.org/10.1007/s40152-020-00203-0</u>

Jentoft, S. (2022, January). The Power Game of Language. Samudra Report.

- Jentoft, S., and Chuenpagdee, R. (2022). Interactive Learning and Governance Transformation for Securing Blue Justice for Small-Scale Fisheries. *Administration & Society*, 009539972110739. <u>https://doi.org/10.1177/00953997211073947</u>
- Jentoft, S., Chuenpagdee, R., Said, A. B., and Isaacs, M. (2022). *Blue justice: Small-scale fisheries in a sustainable ocean economy*. Springer.
- Johnson, D. S. (2006). Category, narrative, and value in the governance of small-scale fisheries. *Marine Policy*, *30*(6), 747–756. <u>https://doi.org/10.1016/j.marpol.2006.01.002</u>
- Johnson, D. S., Acott, T. G., Stacey, N., & Urquhart, J. (2018). Social wellbeing and the values of small-scale fisheries. Springer.
- Johnson, D. S., Lalancette, A., Lam, M. E., Leite, M., and Pálsson, S. K. (2019). The Value of Values for Understanding Transdisciplinary Approaches to Small-Scale Fisheries. In R. Chuenpagdee and S. Jentoft (Eds.), *Transdisciplinarity for Small-Scale Fisheries Governance* (Vol. 21, pp. 35–54). Springer International Publishing. https://doi.org/10.1007/978-3-319-94938-3\_3
- Johnston, D. M., Kimball, L. A., Payoyo, P., & Saunders, P. M. (1995). The law of the sea: priorities and responsibilities in implementing the convention.
- Kapoor, A., Fraser, G. S., and Carter, A. (2021). Marine conservation versus offshore oil and gas extraction: Reconciling an intensifying dilemma in Atlantic Canada. *The Extractive Industries and Society*, 8(4), 100978. <u>https://doi.org/10.1016/j.exis.2021.100978</u>
- Kleiber, D., Frangoudes, K., Snyder, H. T., Choudhury, A., Cole, S. M., Soejima, K., Pita, C.,
  Santos, A., McDougall, C., Petrics, H., and Porter, M. (2017). Promoting Gender Equity
  and Equality Through the Small-Scale Fisheries Guidelines: Experiences from Multiple
  Case Studies. In S. Jentoft, R. Chuenpagdee, M. J. Barragán-Paladines, & N. Franz

(Eds.), *The Small-Scale Fisheries Guidelines: Global Implementation* (pp. 737–759). Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-55074-9\_35</u>

 Knight, C. J., Burnham, T. L. U., Mansfield, E. J., Crowder, L. B., and Micheli, F. (2020).
 COVID-19 reveals vulnerability of small-scale fisheries to global market systems. *The Lancet Planetary Health*, 4(6), e219. <u>https://doi.org/10.1016/S2542-5196(20)30128-5</u>

Kooiman, J. (2003). *Governing as Governance Governing as governance*. SAGE Publications Ltd. <u>https://doi.org/10.4135/9781446215012</u>

Kooiman, J., Bavinck, M., Jentoft, S., and Pullin, R. (Eds.). (2005). *Fish for Life: Interactive Governance for Fisheries*. Amsterdam University Press.

https://doi.org/10.5117/9789053566862

https://doi.org/10.1007/s10784-010-9142-6

Kooiman, J., and Bavinck, M. (2005). The governance perspective. *Fish for Life: Interactive Governance for Fisheries*, *3*, 11.

Kooiman, J., and Jentoft, S. (2009). Meta-governance: values, norms and principles, and the making of hard choices. *Public Administration*, 87(4), 818–836. <u>https://doi.org/10.1111/j.1467-9299.2009.01780.x</u>

Lebel, L., Grothmann, T., and Siebenhüner, B. (2010). The role of social learning in adaptiveness: Insights from water management. *International Environmental Agreements: Politics, Law and Economics, 10*(4), 333–353.

Lélé, S. M. (1991). Sustainable development: A critical review. *World Development*, *19*(6), 607–621. https://doi.org/10.1016/0305-750X(91)90197-P

Lemieux, C. J., Gray, P. A., Devillers, R., Wright, P. A., Dearden, P., Halpenny, E. A., Groulx, M., Beechey, T. J., and Beazley, K. (2019). How the race to achieve Aichi Target 11

could jeopardize the effective conservation of biodiversity in Canada and beyond. *Marine Policy*, *99*, 312–323. <u>https://doi.org/10.1016/j.marpol.2018.10.029</u>

- Loring, P. A., Fazzino, D. V., Agapito, M., Chuenpagdee, R., Gannon, G., and Isaacs, M. (2019).
   Fish and Food Security in Small-Scale Fisheries. In R. Chuenpagdee & S. Jentoft (Eds.),
   *Transdisciplinarity for Small-Scale Fisheries Governance* (Vol. 21, pp. 55–73). Springer
   International Publishing. <u>https://doi.org/10.1007/978-3-319-94938-3\_4</u>
- Lowitt, K. N. (2014). A coastal foodscape: Examining the relationship between changing fisheries and community food security on the west coast of Newfoundland. *Ecology and Society*, 19(3), art48. <u>https://doi.org/10.5751/ES-06498-190348</u>
- Moreau, M.-A., and Garaway, C. J. (2021). Trading Fast and Slow: Fish Marketing Networks
   Provide Flexible Livelihood Opportunities on an East African Floodplain. *Frontiers in Sustainable Food Systems*, 5, 742803. <u>https://doi.org/10.3389/fsufs.2021.742803</u>
- McGoodwin, J.R. (1991). Crisis in the world's fisheries: People, problems, and policies. *Journal* of the Marine Biological Association of the United Kingdom, 71(3), 748–748. https://doi.org/10.1017/S0025315400053340
- Mechler, R., Bouwer, L. M., Schinko, T., Surminski, S., and Linnerooth-Bayer, J. (Eds.). (2019).
   Loss and Damage from Climate Change: Concepts, Methods and Policy Options.
   Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-72026-5</u>
- Mullowney, D. R. J., Dawe, E. G., Colbourne, E. B., and Rose, G. A. (2014). A review of factors contributing to the decline of Newfoundland and Labrador snow crab (Chionoecetes opilio). *Reviews in Fish Biology and Fisheries*, 24(2), 639–657.
  <a href="https://doi.org/10.1007/s11160-014-9349-7">https://doi.org/10.1007/s11160-014-9349-7</a>

- Murray, G., Bavington, D., and Neis, B. (2005). Local ecological knowledge, science, participation and fisheries governance in Newfoundland and Labrador: a complex, contested and changing relationship. In T. S. Gray (Ed.), *Participation in Fisheries Governance* (Vol. 4, pp. 269–290). Springer Netherlands. <u>https://doi.org/10.1007/1-4020-3778-3\_16</u>
- Murray, G. D., and Ings, D. (2015). Adaptation in a time of stress: A social-ecological perspective on changing fishing strategies in the Canadian snow crab fishery. *Marine Policy*, 60, 280–286. <u>https://doi.org/10.1016/j.marpol.2015.07.014</u>
- Nakamura, J., Chuenpagdee, R., and El Halimi, M. (2021). Unpacking legal and policy frameworks: A step ahead for implementing the Small-Scale Fisheries Guidelines. *Marine Policy*, 129, 104568. <u>https://doi.org/10.1016/j.marpol.2021.104568</u>
- Nakamura, J. N. (2022). Legal Reflections on the Small-Scale Fisheries Guidelines: Building a Global Safety Net for Small-Scale Fisheries. *The International Journal of Marine and Coastal Law*, *37*(1), 31–72. <u>https://doi.org/10.1163/15718085-bja10081</u>
- Nayak, P. K., and Berkes, F. (2010). Whose marginalisation? Politics around environmental injustices in India's Chilika lagoon. *Local Environment*, 15(6), 553–567. <u>https://doi.org/10.1080/13549839.2010.487527</u>
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance* (1st ed.). Cambridge University Press. <u>https://doi.org/10.1017/CBO9780511808678</u>
- Northwest Atlantic Fisheries Organization. (2017). *Convention on cooperation in the Northwest Atlantic Fisheries*. <u>http://central.bac-lac.gc.ca/.redirect?app=damspub&id=5c339eaa-</u> <u>8eb1-447e-8bc7-83691868e0f4</u>

- Neis, B., Gerrard, S., and Power, N. G. (2013). Women and children first: The gendered and generational social-ecology of smaller-scale fisheries in Newfoundland and Labrador and Northern Norway. *Ecology and Society*, 18(4), art64. <u>https://doi.org/10.5751/ES-06010-180464</u>
- Neis, B., Ommer, R. E., House, J. D., Flander, W., Foley, P., Fleming, I., Lavers, C., McCay, B.
  J., Pollett, C., Sinclair, P. R., and Sullivan, K. 2014. Moving Forward: Building
  Economically, Socially and Ecologically Resilient Fisheries and Coastal Communities: A
  Policy Paper. CURRA (Community-University Research for Recovery Alliance),
  Newfoundland and Labrador, CA.
- Parker, R. W. R., Hartmann, K., Green, B. S., Gardner, C., and Watson, R. A. (2015). Environmental and economic dimensions of fuel use in Australian fisheries. *Journal of Cleaner Production*, 87, 78–86. <u>https://doi.org/10.1016/j.jclepro.2014.09.081</u>
- Phyne, J. (1990). "Dispute Settlement in the Newfoundland Inshore Fishery : A Study of Fishery Officers' Responses to Gear Conflicts in Inshore Fishing Communities." *Maritime Anthropological Studies : MAST* 3, no. 2, 88-102.
- Pinkerton, E., and Edwards, D. N. (2009). The elephant in the room: The hidden costs of leasing individual transferable fishing quotas. *Marine Policy*, *33*(4), 707–713.

https://doi.org/10.1016/j.marpol.2009.02.004

Pinkerton, E., and Davis, R. (2015). Neoliberalism and the politics of enclosure in North American small-scale fisheries. *Marine Policy*, 6.

https://doi.org/10.1016/j.marpol.2015.03.025

Pocius, G. L. (1979). Hooked rugs in Newfoundland: The representation of social structure in design. *The Journal of American Folklore*, *92*(365), 273–284.

- Pomeroy, R. S., and Andrew, N. (Eds.). (2011). *Small-scale fisheries management: Frameworks* and approaches for the developing world. CABI.
- Prabhat, S. (2011). "Difference Between Law and Policy." Difference Between Similar Terms and Objects. Retrieved from,

http://www.differencebetween.net/miscellaneous/politics/difference-between-law-and-policy/

- Professional Fish Harvesters Certification Board. (2022). "Objectives of the PFHCB." Retrieved June 2, 2022, from https://www.pfhcb.com/objectives-of-the-pfhcb
- QGIS Development Team (2021). QGIS Geographic Information System. Open Source Geospatial Foundation Project. <u>http://qgis.osgeo.org</u>
- Rahman, Moh. S., Toiba, H., and Huang, W-C. (2021). The Impact of Climate Change
  Adaptation Strategies on Income and Food Security: Empirical Evidence from SmallScale Fishers in Indonesia. *Sustainability*, *13*(14), 7905.
  https://doi.org/10.3390/su13147905
- Sabau, G., and Boksh, F. M. (2017). Fish trade liberalization under 21st century trade agreements: the CETA and Newfoundland and Labrador fish and seafood industry. *Ecological Economics*, *141*, 222-233.
- Sabau, G., and de Jong, M. V. Z. (2015). From unjust uneconomic growth to sustainable fisheries in Newfoundland: the true costs of closing the inshore fishery for groundfish. *Marine Policy*, 61, 376-389.
- Schrank, W. E., Skoda, B., Parsons, P., and Roy, N. (1995). The cost to government of maintaining a commercially unviable fishery: the case of Newfoundland 1981/82 to 1990/91. Ocean Development & International Law, 26(4), 357-390.

- Schrank, W. E. (1998). The failure of Canadian seasonal fishermen's unemployment insurance reform during the 1960s and 1970s. *Marine Policy*, *22*(1), 67-81.
- Schrank, W. E. (2005). The Newfoundland fishery: Ten years after the moratorium. *Marine Policy*, 29(5), 407–420. <u>https://doi.org/10.1016/j.marpol.2004.06.005</u>
- Schreiber, D. K. (2001). Co-management without involvement: The plight of fishing communities: Communities and co-management. *Fish and Fisheries*, 2(4), 376–384. <u>https://doi.org/10.1046/j.1467-2960.2001.00057.x</u>
- Schreiber, M. A., Chuenpagdee, R., & Jentoft, S. (2022). Blue Justice and the co-production of hermeneutical resources for small-scale fisheries. *Marine Policy*, 137, 104959. <u>https://doi.org/10.1016/j.marpol.2022.104959</u>
- Silver, J. J., Gray, N. J., Campbell, L. M., Fairbanks, L. W., and Gruby, R. L. (2015). Blue Economy and Competing Discourses in International Oceans Governance. *The Journal of Environment & Development*, 24(2), 135–160. https://doi.org/10.1177/1070496515580797
- Smith, D., Woodrow, M., Vodden, K. (2012). Rationalization of the Fishing Industry: the Case of Change Islands, NL. Policy Brief No. 1. Retrieved from <u>https://gracilis.carleton.ca/tgeog/downloads/Using%20Local%20Knowledge,%20PB%20</u> <u>1%20(June%202012).pdf</u>
- Smith, D. A., Vodden, K., Woodrow, M., Khan, A., and Fürst, B. (2014). The last generation? Perspectives of inshore fish harvesters from Change Islands, Newfoundland. *The Canadian Geographer/Le Géographe canadien*, 58(1), 95-109.

- Solano, N., Lopez-Ercilla, I., Fernandez-Rivera Melo, F. J., and Torre, J. (2021). Unveiling Women's Roles and Inclusion in Mexican Small-Scale Fisheries (SSF). *Frontiers in Marine Science*, 7, 617965. <u>https://doi.org/10.3389/fmars.2020.617965</u>
- Song, A. M., Chuenpagdee, R., and Jentoft, S. (2013). Values, images, and principles: What they represent and how they may improve fisheries governance. *Marine Policy*, 40, 167–175. <u>https://doi.org/10.1016/j.marpol.2013.01.018</u>
- Song, A. M., and Chuenpagdee, R. (2015). A principle-based analysis of multilevel policy areas on inshore fisheries in Newfoundland and Labrador, Canada. In *Interactive Governance for Small-Scale Fisheries* (pp. 435-456). Springer, Cham.
- Song, A. M., Johnsen, J. P., and Morrison, T. H. (2018). Reconstructing governability: How fisheries are made governable. *Fish and Fisheries*, 19(2), 377–389. <u>https://doi.org/10.1111/faf.12262</u>
- St. Martin, K., and Hall-Arber, M. (2008). Creating a Place for "Community" in New England Fisheries. *Human Ecology Review*, *15*(2), 161–170. JSTOR.
- Stephenson, R. L., Wiber, M., Paul, S., Angel, E., Benson, A., Charles, A., Chouinard, O., Edwards, D., Foley, P., Lane, D., McIsaac, J., Neis, B., Parlee, C., Pinkerton, E., Saunders, M., Squires, K., and Sumaila, U. R. (2019). Integrating diverse objectives for sustainable fisheries in Canada. *Canadian Journal of Fisheries and Aquatic Sciences*, 76(3), 480–496. <u>https://doi.org/10.1139/cjfas-2017-0345</u>
- Szymkowiak, M. (2020). Genderizing fisheries: Assessing over thirty years of women's participation in Alaska fisheries. *Marine Policy*, 115, 103846. <u>https://doi.org/10.1016/j.marpol.2020.103846</u>

- Teh, L. C. L., and Pauly, D. (2018). Who Brings in the Fish? The Relative Contribution of Small-Scale and Industrial Fisheries to Food Security in Southeast Asia. *Frontiers in Marine Science*, 5, 44. <u>https://doi.org/10.3389/fmars.2018.00044</u>
- Teh, L. C. L., Teh, L. S. L., Abe, K., Ishimura, G., and Roman, R. (2020). Small-scale fisheries in developed countries: Looking beyond developing country narratives through Japan's perspective. *Marine Policy*, 122, 104274. <u>https://doi.org/10.1016/j.marpol.2020.104274</u>
- Thiessen, V., and Davis, A. (2008). Recruitment to small boat fishing and public policy in the Atlantic Canadian fisheries. *Canadian Review of Sociology/Revue Canadienne de Sociologie*, *25*(4), 603–627. https://doi.org/10.1111/j.1755-618X.1988.tb00122.x
- Thomas, E., Vodden, K., Chuenpagdee, R., and Woodrow, M. (2014). *Fishing Policies and Island Community Development*. Memorial University Harris Centre.
- Too Big To Ignore. (2020). Unlocking national legal and policy frameworks template. https://tbtiglobal.net/unlocking-legal-and-policy-frameworks-for-ssf-2/
- Voyer, M., Quirk, G., McIlgorm, A., and Azmi, K. (2018). Shades of blue: What do competing interpretations of the Blue Economy mean for oceans governance? *Journal of Environmental Policy & Planning*, 20(5), 595–616. <u>https://doi.org/10.1080/1523908X.2018.1473153</u>
- Walker, G. (2012). *Environmental Justice* (0 ed.). Routledge. https://doi.org/10.4324/9780203610671
- Walsh, D. (2011). What restructuring? Whose rationalization? Newfoundland and Labrador's memorandum of understanding on its fishing industry. *World-Small-Scale Fisheries: Contemporary Visions. Eburon, Delft, The Netherlands*, 81–97.

Watson, M. S., and Hewson, S. M. (2018). Securing protection standards for Canada's marine protected areas. *Marine Policy*, *95*, 117–122.

https://doi.org/10.1016/j.marpol.2018.07.002

- Weeratunge, N., Béné, C., Siriwardane, R., Charles, A., Johnson, D., Allison, E. H., Nayak, P.
  K., and Badjeck, M.-C. (2014). Small-scale fisheries through the wellbeing lens. *Fish and Fisheries*, *15*(2), 255–279. <u>https://doi.org/10.1111/faf.12016</u>
- Wiber, M. G., Mather, C., Knott, C., and Gómez, M. A. L. (2021). Regulating the Blue Economy? Challenges to an effective Canadian aquaculture act. *Marine Policy*, 131, 104700. <u>https://doi.org/10.1016/j.marpol.2021.104700</u>
- Windle, M., Rose, G., Devillers, R., and Fortin, M. (2012). Spatio-temporal variations in invertebrate-cod-environment relationships on the Newfoundland-Labrador Shelf, 1995–2009. *Marine Ecology Progress Series*, 469, 263–278.

https://doi.org/10.3354/meps10026

- Yang Gonzalez, B. (2018). Perspectives from Select Women Working in Alaskan Commercial Fisheries [Dissertation]. University of Rhode Island.
- Yodanis, C. L. (2000). Constructing Gender and Occupational Segregation: A Study of Women and Work in Fishing Communities. *Qualitative Sociology*, 23(3), 267–290.

https://doi.org/10.1023/A:1005515926536

# **Appendix I: Sample Research Questionnaire**

Date:

Consent to Audio Record:

- 1) What is your involvement in the fisheries/ what fisheries do you participate in?
- 2) What vessel size do you work on/ own?
- 3) What is your general impression of the fisheries? What about regarding the way the fisheries are regulated?

There is a document called the Small-Scale Fisheries Guidelines, which brings attention to the contributions of the small-scale fisheries. Canada has recently recognized this document but made no indication of how they're going to implement it, so that is what we are trying to figure out. In the document, there are 13 principles. Each of these is represented by a card with a short definition on the back. On the board are three categories. In the center, goes any card which, according to your opinion, is sufficiently implemented, as is. In the middle (green ring), goes any card which needs some work. And on the outside, goes any card which needs a lot of work, action and attention to get where we need to go. Feel free to place any card to the side if you feel unsure or neutral. As you sort the principles, please explain why you are making that choice.

Principle	Placement/ Justification
Human rights and dignity	
Respect of cultures	
Non-discrimination	
Gender equity and equality	
Equity and equality	
Consultation and participation	
Rule of law	
Transparency	
Accountability	
Economic, social and environmental	
sustainability	
Holistic and integrated approaches	
Social responsibility	
Social and economic viability	

Table 1: Participant placement and justification for principles

4) What are some components of an ideal fisheries scenario?

Table 2: Sorting Cards definition used on the cards, adapted from the SSF Guidelines definition

SSF	SSF Guidelines Definition	Sorting Game Card
Guidelines		Definition
Principle		

Human rights and dignity	Recognizing the inherent dignity and the equal and inalienable human rights of all individuals, all parties should recognize, respect, promote and protect the human rights principles and their applicability to communities dependent on small-scale fisheries, as stipulated by international human rights standards: universality and inalienability; indivisibility; interdependence and interrelatedness; nondiscrimination and equality; participation and inclusion; accountability and the rule of law. States should respect and protect the rights of defenders of human rights in their work on small-scale fisheries. All non-state actors including business enterprises related to or affecting small-scale fisheries have a responsibility to respect human rights. States should regulate the scope of activities in relation to small- scale fisheries of non-state actors to ensure their compliance with international human rights standards.	Fishers have a right to fishing livelihood, an equal opportunity to participate in fisheries, and an autonomy to make decisions about their fishing enterprises.
Respect of cultures	recognizing and respecting existing forms of organization, traditional and local knowledge and practices of small- scale fishing communities, including indigenous peoples and ethnic minorities encouraging women leadership and taking into account Art. 5 of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).	Fishers' local knowledge and connections to the ocean are respected, seen as inherently valuable parts of culture and identity.
Non- discrimination	Promoting in the small-scale fisheries the elimination of all kinds of discrimination in policies and in practice.	Fisheries laws and policies are made in ways that do not discriminate or disadvantage certain sectors of the fisheries.
Gender equity and equality	is fundamental to any development. Recognizing the vital role of women in small-scale fisheries, equal rights and opportunities should be promoted.	The vital contributions of women in fisheries, on and off the water, need to be recognized, along with institutional support for women to own and operate their own vessels.
Equity and equality	Promoting justice and fair treatment – both legally and in practice – of all people and peoples, including equal rights to the enjoyment of all human rights. At the same time, differences between women and men should be acknowledged and specific measures taken to accelerate de facto equality, i.e. using preferential treatment where required to achieve equitable outcomes, particularly for vulnerable and marginalized groups.	Fisheries laws and regulations are applied fairly and consistently, with due consideration for vulnerable and marginalized groups.
Consultation and participation	Ensuring active, free, effective, meaningful and informed participation of small-scale fishing communities, including indigenous peoples, taking into account the UN Declaration on the Rights of Indigenous Peoples (UN DRIP) in the whole decision-making process related to fishery resources and areas where smallscale fisheries operate as well as adjacent land	Mechanisms and appropriate processes are put in place to enable meaningful participation of fishers in decision-making.

		· · · · · · · · · · · · · · · · · · ·
	areas, and taking existing power imbalances between different parties into consideration. This should include feedback and support from those who could be affected by decisions prior to these being taken, and responding to their contributions.	
Rule of law	adopting a rules-based approach for small-scale fisheries through laws that are widely publicized in applicable languages, applicable to all, equally enforced and independently adjudicated, and that are consistent with existing obligations under national and international law, and with due regard to voluntary commitments under applicable regional and international instruments.	Laws applied to small- scale fisheries must be made known to fisher people and are consistent with other commitments and obligations.
Transparency	clearly defining and widely publicizing policies, laws and procedures in applicable languages, and widely publicizing decisions in applicable languages and in formats accessible to all.	Policies and decision- making are clearly defined and widely publicized.
Accountability	holding individuals, public agencies and non-state actors responsible for their actions and decisions according to the principles of the rule of law.	Individuals, government and businesses are responsible for their actions and decisions according to the law.
Economic, social and environmental sustainability	applying the precautionary approach and risk management to guard against undesirable outcomes, including overexploitation of fishery resources and negative environmental, social and economic impacts.	Extra care is taken to avoid undesirable outcomes from fisheries, like stock decline, or environmental degradation, which would have devastating social and economic impacts.
Holistic and integrated approaches	recognizing the ecosystem approach to fisheries (EAF) as an important guiding principle, embracing the notions of comprehensiveness and sustainability of all parts of ecosystems as well as the livelihoods of small-scale fishing communities, and ensuring cross-sectoral coordination as small-scale fisheries are closely linked to and dependent on many other sectors.	Fisheries management takes into consideration ecosystem health, fishers' well-being and community-based livelihood.
Social responsibility	Promoting community solidarity and collective and corporate responsibility and the fostering of an environment that promotes collaboration among stakeholders should be encouraged.	Community cohesion, collaboration and corporate responsibility are encouraged and promoted.
Social and economic viability	Ensuring that policies, strategies, plans and actions for improving small-scale fisheries governance and development are socially and economically sound and rational. They should be informed by existing conditions, implementable and adaptable to changing circumstances, and should support community resilience.	Fisheries policies, strategies and plans aim to promote social and economic viability, and community resilience.

# **Appendix II: What do the SSF Guidelines Mean According to Small-Scale Fishers in NL?**

The following definitions are adapted from fisher responses as a whole, to better understand what the SSF Guidelines principles mean in the NL context. They are useful to make the principles more applicable to the issues which fishers face here in NL. One challenge of writing the definitions is the significant amount of overlap between the principles. Nonetheless, the best possible description of each principle shown below.

**Human rights and dignity:** DFO's treatment of fishers fairly represents the inherent rights of human beings and traditional rights of small-scale fishers. As such, fishers are given the right to make decisions, in particular those decisions which keep the skipper and crew safe. Fishers speak up, know their rights, and stick together, and DFO is adaptive and responsive to fisher perspectives. Laws are eliminated which require fishers to conduct their operations in ways that promote loss of dignity, such as dumping dead fish at sea. Overall, the rights and dignity of those living in rural communities is respected equally to those living in urban communities, including access to essential services and healthcare, entertainment, and opportunities for economic growth.

**Respect of cultures:** Traditional fishing grounds and handliners are respected. Fishers' knowledge is taken seriously concerning fish stocks and ecosystem changes. Fishers have the right to access and harvest adjacent and traditionally hunted fish and seals for personal food consumption and/ or livelihood. Larger boats give smaller, less technologically developed boats space on the water. DFO and fisheries officers respect fishers as educated and intelligent professionals. The values of fisheries and seal hunting are recognized and promoted as essential components of "living a good life" not just for fishers, but also for fish and marine mammals. Fishers' rights and culture are protected, which includes looking after recruitment and breeding of fish species so that fisheries can last long into the future.

**Non-discrimination:** Small-scale fishers, even those without crab licenses or core status, can make a living alongside larger boats. Small-scale fishers and handliners have sufficient space and quota to make a viable living from the fisheries. Viability for the small-scale fleet entails that fish processing plants do not discriminate against or disadvantage smaller boats by offering a lesser price, but instead make efforts to increase the market value of a diversity of fish species. Large boats, companies and processors are prevented from gaining too much power. Rules and regulations are consistent across provinces and regions. Even fishers with little power or financial profit have an equal say in governance.

**Gender equality and equity:** Women's participation in the fisheries on and off the water is respected, which means acknowledging the role that women play in the community such as raising families or doing bookwork. Young women take leading roles in the fishery including running their own enterprises and no one, including community members, or government employees, questions or second guesses a woman's involvement or ability to participate in the fisheries. Young girls and women are encouraged to become involved in the fisheries, with help gaining access to certifications, licenses, and safety and training courses to become professional fish harvesters.

**Equity and equality:** Inshore and small-scale fisheries, tied to local communities through onshore processing, have priority access to adjacent resources. Efforts are made to avoid declining support and quotas for the small-scale fisheries relative to offshore fleets. Core and non-core fishers are guaranteed rights to make decisions over their enterprises.

**Consultation and participation:** DFO keeps in touch with fishers by phone, email and inperson about policy changes and future decision-making. Fishers can easily speak with DFO to ask questions, seek help, or share views. Online and in-person meetings occur, with the opportunity for fishers to set the agenda of those meetings, so that DFO can understand fisher perspectives, irrespective of fishers' position in the union, access to technology, or distance from urban centers. Fishers' expert knowledge is acknowledged by the structure of consultations such that small-scale fishers are treated as equals in deliberation and recognized as primary stakeholders. Consultation occurs not just about quotas and seasonality, but a range of issues. Participation is meaningful, shared, and not burdensome.

**Rule of law:** Poaching is uncommon due to fisher education and strict monitoring. Rules are not overly prescriptive, with safety as the number one priority. Fishers understand conservation rules through education. Rules do not change quickly but are responsive and adaptive to an extent. Rules are simply stated and not overwhelming in number. Fisheries officers work with fishers to make them aware of laws before penalizing them. Fisheries officers appreciate fishing culture and are not "out to get" fishers. Fishers can work on the water without being subjected to constant and unavoidable fines.

**Transparency:** Fishers are made aware of the details of laws and policies before decisions are finalized. There is flow of information between government and fishing people on the reasons why decisions are made. Decision making is not done by hidden processes 'in an office,' but made clear to all fishers and widely publicized.

Accountability: The government makes widely available information about how and where decisions are made, and openly admits when decisions resulted in negative outcomes for small-scale fishers. Government holds sectors and industries other than fisheries accountable to the strict conservation measures by which small-scale and inshore fishers must abide. DFO takes responsibility for fisher safety by allowing fishers to act on self-identified safety measures. Fishers, government and businesses do not blame others, but collectively seek solutions to problems and accept when decisions were made wrongfully. Government and elected officials take responsibility for future and past decisions.

**Economic, social and environmental sustainability:** Government and fishers take extra care to ensure the fishery is intact for future generations. Small crabs and lobsters and breeding females are kept alive. Measures are taken to improve science and increase the involvement of fishers in planning and charting scientific surveys. Prices and quotas are stable over time. Fisheries are protected from harmful activities like seismic testing and offshore trawling. Fisheries are not overfished. Fishers are not blamed for stock declines, which might be the result of several variables outside fishers' control. Communities are healthy and young people continue to become involved for the future continuation of the fisheries. Less destructive fishing gears are promoted, and small-

scale fishers are recognized for having small environmental impacts. Measures are taken to ensure that new and emerging fisheries are preserved for the future and not overfished.

**Holistic and integrated approaches:** Government avoids focusing only on one fishery but encourages economic diversity of the fisheries. Government recognizes that, due to cross-sectoral integration, promoting or allowing industrial activities, such as fish farming or oil and gas exploration, may result in harm to small-scale fisheries and ecosystems. A small-scale and diversified processing sector is encouraged for healthy and successful inshore fisheries, to improve fish prices and community well-being. Management authority is decentralized from Ottowa and urban centers in NL into local communities.

**Social responsibility:** Fishing communities are close and caring with the absence of excessive social conflict. Fishers support and strictly follow conservation laws. Fishers offload a certain portion their catch in the home port/ community to ensure small-boat wharf infrastructure and maintenance is continued. Fishers support, when possible, small and local buyers and fish companies. Fishers, plants and communities work together. Fish plants look after the fisheries workers and fishers. Fisheries provide a decent living (paying the bills plus a little extra) to not just skippers but also crew and plant workers, as well as spinoff industries, local businesses and government jobs.

**Social and economic viability:** Community vibrancy is promoted, giving the younger generation reasons to stay in the community. Viable small fish plants in each harbour and the ability to offload catch in one's own community is promoted. Quota and license cost is controlled and made affordable for small boat and young fishers. The attractiveness of job opportunities in the fishing industry is emphasized for reasons other than, and including, profitability. The essential role of small-scale and inshore fisheries in small communities is recognized and protected. Rural communities and the lifestyle it provides to residents there is valued and promoted, with government supports and funding to help these communities continue and thrive. Small boats with one quota can make a viable living based on quota and entrance costs into the fishery. Measures are taken to improve local markets for reduced vulnerability to global quotas, price fluctuations, and/ or crises. Owner-operator and controlling agreements are prevented, ensuring that economic benefits remain in communities.

# **Appendix III: List of Documents Reviewed**

Table 1 Number and types of documents reviewed

Type of Document	Federal Documents	Provincial Documents
Fisheries laws	6	7
Fisheries policies	19	4
Laws non-specific to fisheries	23	12
Policies non-specific to fisheries	9	6
Programs, strategies, departmental mandates	17	17
Total (119)	72	47

#### Federal Fisheries Laws and Regulations (9)

Atlantic Fishery Regulations, 1985, SOR/86-21 Coastal Fisheries Protection Act R.S.C., 1985, c. C-33 Canada Shipping Act S.C. 2001, c. 26 Fisheries Act R.S.C. 1985, c. F-14 Fisheries Restructuring Act, 1983 Fishing and Recreational Harbours Act R.S.C., 1985, c. F-24 Fishing Industry Collective Bargaining Act RSNL 1990 Chapter F-18 Oceans Act S.C. 1996 c. 31 Species at Risk Act S.C. 2002, c. 29

# **Federal Fisheries Policies (19)**

Aboriginal Fisheries Strategy, 1992 A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast (DFO 2004) Fleet Separation Policy (1979) Fishery Monitoring Policy Eastport Marine Protected Area Policy (DFO 2005) **Owner-Operator Policy (1989)** The Commercial Fisheries Licensing Policy for Eastern Canada (1996) Commercial Fisheries Licensing Policy for NL (DFO 1996) New Access Framework (2002) Policy for Preserving the Independence of the Inshore Fleet of Atlantic Canada (PIIFCAF) (2007)The Policy on the Issuance of Licenses to Companies for Canada's Inshore Atlantic Fisheries (PILCCIAF) (2017) Fisheries Licensing Policy for Newfoundland and Labrador Region (2020) Sustainable Fisheries Framework (SFF) (2009) Fisheries Licensing Policy for Newfoundland and Labrador Region 2021 The Policy on Underutilized Species, 1988 The Emerging Fisheries Policy, 1996 The New Emerging Fisheries Policy, 2008

Framework and Guidelines for Implementing the Co-Management Approach (1999) Volume I-III Policy on Gender-Based Analysis Plus (GBA+): Applying an Intersectional Approach to Foster

#### Federal laws and regulations non-specific to fisheries (23)

Access to Information Act 1985 The Aquatic Invasive Species Regulations SOR/2015-121 Canada Labour Code R.S.C., 1985, c. L-2 Canadian Bill of Rights S.C. 1960, c. 44 Canadian Environmental Protection Act S.C. 1999, c. 33 Canadian Food Inspection Agency Act (S.C. 1997, c. 6) Canadian Human Rights Act R.S.C., 1985, c. H-6 Canadian Multiculturalism Act R.S.C., 1985, c. 24 (4<sup>th</sup> Supp.) Canadian Race Relations Foundation Act of 1991 Constitution Act, 1982 Employment Equity Act S.C. 1995, c. 44 Employment Insurance (Fishing) Regulations SOR/96-445 Employment Insurance Act S.S. 1996, c. 23. Equal Wages Guidelines, 1986 SOR/86-1082 Federal Accountability Act S.C. 2006, c. 9 Federal Sustainable Development Act S.C. 2008, c. 33 Genetic Non-discrimination Act S.C. 2017, c. 3 Human Rights Act SNL 2010 Chapter H-13.1 Labrador Inuit Land Claims Agreement Act S.C. 2005, c. 27 Privacy Act 1983 Rehabilitation Act of 1973 Transparency and Accountability Act, SNL 2004 Ch. T-8.1 Unemployment Insurance Benefits Order, 1990, SOR/90-54, and 91-74.

#### Federal policies non-specific to fisheries (9)

Action Plan on Open Government Action Plan for the Renewal and Expansion of DFO's Indigenous Programs 2017 Corporate Responsibility Strategy Federal Contract Compliance Program Federal Sustainable Development Strategy Gender-based Analysis + Integrated Aboriginal Policy Framework, 1992 Pan-Canadian Framework for Clean Growth and Climate Change (2018) Strengthening our Relationship: The Aboriginal Fishing Strategy and Beyond, 2003

# **Provincial Fisheries Laws and Regulations (7)**

Fisheries Act, SNL 1995 Chapter F-12.1 Fish Inspection Act, 1990, RSNL F-12 Fish Inspection Administrative Regulation under the Fish Inspection Act (O.C. 2007-293) Fishing Industry Collective Bargaining Act (RSNL 1990 Chapter F-18) Fisheries Restructuring Act (1983) RSNL1990 F-14 Fish Processing Licensing Board Act, 2004, c-F-12.01 Professional Fish Harvesters Act, SNL 1996, c P-26.1

# **Provincial Fisheries Policies (4)**

Fish Processing Licensing Policy (2001) Report on "Fisheries Science Needs assessment for Newfoundland and Labrador Commercial Renewing the NL Fishing Industry Initiative (2006) Species and Ecosystems" (2015)

# Provincial laws non-specific to fisheries (12)

Environmental Protection Act SNL 2002 cE-14 Water Resources Act SNL2002 ch. W-4.01 Environmental Protection and Water Resources Acts of 2002 Guide to Water Resources Act House of Assembly Accountability, Integrity and Administration Act SNL 2007 Chapter H-10 Labour Standards Act RSNL 1990 Chapter L-2 Labrador Inuit Land Claims Agreement Act SNL 2004 Chapter L-3.1 Pay Equity Agreement Act Public Restraint Act of 1991 Public Interest Disclosure and Whistleblower Protection Act 2004 Sustainable Development Act SNL 2007 Chapter S-34 Transparency and Accountability Act SNL 2004 Chapter T-8.1

# Provincial policies non-specific to fisheries (6)

Coastal and Ocean Management Strategy and Policy framework for Newfoundland and Labrador (2011) Framework for Incorporating Climate Change into Public Infrastructure Planning (NL) (NL 2018) Guide to Water Resources Act (2002) Policy on Multiculturalism The Access. Inclusion. Equality. Strategy The Way Forward (NL 2019)

# Federal Programs, strategies, departmental mandates and other (17)

Canadian Fisher and Seafood Opportunities Fund Canadian Human Rights Commission Canadian Seafood Stabilization Fund Climate Change and Health Adaptation Program Climate Change Preparedness in the North Employment and Social Development Canada Environmental and Climate Change Canada Fish Harvester Benefit and Grant Program First Nation Adapt Indigenous Community-Based Climate Monitoring Integrated Fisheries Management Plans for NL Northern Responsible Energy Approach for Community Heat and Electricity Atlantic Fisheries Fund Rural Economic Development Canada

Sustainable Fisheries Solutions and Retrieval Support Contribution Program Sustainable Fish and Seafood Sustainable Fisheries Resource Advisory Council of Canada, established 2018

#### Provincial Programs, strategies, departmental mandates and other (17)

Atlantic Climate Adaptation Solutions Association- Regional Adaptation Collaborative Canada-Newfoundland and Labrador Committee on Coastal and Oceans Management Coastal Management Area Integrated Management Committees Code of Conduct for Members of the House of Assembly (MHA) Geological Survey of Newfoundland and Labrador Independent Appointments Commission Large Ocean Management Area Committees Multicultural Women's Organization of Newfoundland and Labrador NL Human Rights Commission Provincial Advisory Council on the Status of Women Provincial Coastal and Ocean Network Regional Oversight Committee on Oceans Management Report on "Fisheries Science Needs assessment for Newfoundland and Labrador Commercial Species and Ecosystems" (2015) Sustainable Fisheries and Oceans Policy Division Women in Resource Development Corporation Women's Policy Office 2J crab directive, 2000