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# **Coastal Livelihoods in Northern Norway: Sustainable Development of Small-Scale Fishers and Sámi**

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*Master's Thesis in Indigenous Studies ... May 2017*





# Coastal Livelihoods in Northern Norway: Sustainable Development of Small-Scale Fishers and Sámi

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by

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## **Abstract**

The sustainable development of small-scale fisher livelihood is important for the well-being and food security of millions of people around the world. However, factors that contribute to the sustainable development of this livelihood are under-developed in research (The World Bank, 2008; United Nations Food and Agriculture Organization, 2007). Within this knowledge gap, this applied research project explores factors that contribute to the sustainable development of small-scale fisher livelihoods in northern Norway, a region where the indigenous way of life for coastal Sámi dates back centuries (Pedersen, 2012). In doing so, it includes a case study conducted on the island of Spildra in Troms County, in which contemporary livelihood is examined and factors identified as challenging are investigated using a sustainable livelihood approach to research. Subsequently, based on research informant's goals and aspirations, suggestions are prescribed that potentially provide the opportunity to help reach goals of sustainable development, including community-based collaborative management of natural marine resources (co-management) and asserting a human rights-based approach to problem-solving.

*Keywords:* indigenous studies, sustainable development, small-scale fishers, coastal Sámi, livelihoods, northern Norway.



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Firstly, I would like to acknowledge my supervisor Jorun Bræck Ramstad for her patience, guidance in ‘reading me’ and sharing her understandings of northern Norwegian and Māori culture with me during this educational journey. Thanks, must also be offered to all the other students and staff within the University of Tromsø - including everyone in both the Masters of Indigenous Studies program and at the Centre for Sámi Studies - who provided me with invaluable support and knowledge, friendship, finance and critique during this graduate course. Respect and thanks must also be offered to those within the community of Spildra who accepted my aim to help, welcomed me in and shared so generously during this research project. Finally, I would like to say thank you to my family and whanau for supporting and believing in me, because without them none of this would have been possible.

Gittu! Gittu! Gittu!





*This thesis is dedicated to Roger Olsen of Spildra and others passed in battle defending their indigenous communities and seas.*

*“Hoatu te mana  
ki a ratou kua tae mai nei ki tenei whenua  
kua wheturanitia i te korowai o Ranginui,  
kua hangaia i tenei tikanga hoki.”*

*“Give credit and recognition  
to those who have departed and are adorned as stars in the heavens,  
to those who built this tikanga (meaning) also.”*

(maori.org.nz, 2017)



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## List of Abbreviations

FAO	United Nations Food and Agricultural Organization
SESAM	University of Tromsø Centre for Sámi Studies
MIS	Master of Indigenous Studies
NSD	Norwegian Centre for Research Data
WCED	World Commission on Environment and Development
SLA	Sustainable Livelihood Approach
SLF	Sustainable Livelihood Framework
VC	Vulnerability Context
LA	Livelihood Assets
TSP	Transforming Structures and Processes
LS	Livelihood Strategies
LO	Livelihood Outcomes
ILO 169	United Nations International Labour Organization Convention No. 169 on Indigenous and Tribal Peoples in Independent Countries
UNCCPR	United Nations Covenant on Civil and Political Rights

# Foreword

Ko Taupiri toku maunga, ko Hauraki toku moana, ko Waikato toku awa, ko Tainui toku rohe, ko Waikato toku iwi, ko Turangawaewae toku marae, ko Te Kohatu me Peter Michael Miller oku ingoa.

Tena koutou, tena koutou, tena tatou katoa.

Nau mai haere mai, welcome.

It is exciting to present to you this finished thesis after an extraordinary two years of graduate studies here in Norwegian Sápmi. Coming from Aotearoa New Zealand, I am a very long way from my home, my whenua (land) and my people. This thesis you are about to read has been a labour of love and I hope that by the end of reading it you will have added insight into the powerful potential that the concept of 'indigenous' holds for reaching goals for sustainable development. Indigenous holds power to, I believe, help solve many of massive challenges faced, in an age where many are convinced that there is no way local people can win over multinational businesses, neo- forms colonization and imperialism, especially in places where we live as indigenous people and have legitimate reasonability to safeguard. Indigenous also provides hope. Hope that I believe is fundamentally important if we are to truly leave our world(s) for our grandchildren's grandchildren in as good as, if not better states as those we have now. Especially when it comes to sharing in sustainably developing the abundance we have with each other collectively - now and in the future - indigenous and non-indigenous alike.

For myself, becoming indigenous has not been easy. Colonization at home and its affiliated resource wars and assimilative social projects have affected my family's Māoritanga - our indigenous Māori way of life and culture - immensely. This opportunity here in northern Norway has provided with so much in helping me in my endeavors to be both Māori and indigenous again.

Tihei, mauri ora!

Peter M. Miller

Tromsø 14.05.2017





# 1 Introduction

The oceans and seas are absolutely vital to the future of the entire planet and its people. Unsustainable fisheries, pollution, and the destruction of habitats are major threats to the oceans as a means of livelihood and a source of food to a growing, global population. The cause of these threats is often insufficient local and regional marine resource management. (United Nations, 2016, p. 23)

Many of the world's people live in coastal communities and rely on marine resources to survive. Small-scale fishers<sup>1</sup> are not only important within these communities, but also for the well-being of millions of people globally and valuable to individual, community, national and international economies (World Bank, 2008). Because of this, the World Bank (2008) insists that effective management efforts are needed to ensure the sustainable development<sup>2</sup> of small-scale fisher livelihoods<sup>3</sup>; livelihoods which contribute importantly to the food security and nutrition for many communities around the world. Therefore, it is essential marine resource management efforts collaborate with fishers if resources, such as fisheries and ecological services, are to be effectively developed long-term. However, many factors that contribute to the sustainable development of small-scale fishers are poorly understood (United Nations Food and Agriculture Organization, 2007; The World Bank, 2008).

This thesis aims to assist in filling this knowledge gap by conducting research in northern Norway<sup>4</sup>, where the indigenous<sup>5</sup> way of life as small-scale fishers for coastal Sámi in the region dates back centuries (Pedersen, 2012). However, the sustainability of this form of livelihood is

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<sup>1</sup> Small-scale fishers defined as fishers that harvest both for sale and their own consumption, fish within a limited marine area, often part-time on boats less than 24 m, and catch is utilized fresh or processed for human eating; different from sub-categories such as subsistence, large-scale or recreational fishers (The World Bank, 2008).

<sup>2</sup>Sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 54).

<sup>3</sup>Livelihood can be defined as ‘how people attain a living’ (Chambers & Conway, 1991; Scoones, 2009).

<sup>4</sup> Northern Norway defined as north of the Saltfjellet mountain range (Statistics Norway, 2016).

<sup>5</sup> For various definitions of indigenous peoples see the International Labor Organization (1989) and Smith (2012).

under threat and efforts are required to help build knowledge that can contribute to its sustainable development (Brattland, 2012; Nilsen, 2005). Consequently, the sustainable management of the natural marine resources small-scale fishers depend on and managing rights associated with them is challenging (Pedersen, 2012; Davis & Jentoft, 2005).

In Norway's voluntary review to achieving the 2030 Sustainable Development Goals - from which the opening quote of this introduction was taken - the Norwegian nation-state is committed to the sustainable development of marine resources and coastal Sámi way of life (United Nations, 2016). It could be argued that because of this, small-scale fishers in northern Norway have a comparative advantage compared to other fishers around the world in sustainably developing their livelihoods. In addition, that coastal Sámi fishers too have a comparable advantage compared to other indigenous fishers because,

Norwegian fisheries authorities acknowledge their international obligations to facilitate the maintenance of traditional Sámi fisheries. The Government considers the existing rules for regulating and participating in fisheries to be in accordance with international law regarding the rights of minorities and indigenous people. [...] [acknowledging,] [t]he protection, restoration and sustainable use of ecosystems can also safeguard the basis for a sustainable Sámi culture. (United Nations, 2016, pp. 23-24)

However, as this thesis shows, small-scale fishers and coastal Sámi face serious challenges in sustainably developing their livelihoods. Consequently, this thesis argues more safeguards are needed to protect the basis of these ways of life.

The main objective of this explorative study is to identify challenging factors that affect the sustainable development of these livelihoods. In doing so, a case study conducted within a northern Norwegian community on the island of Spildra in Troms County, in which small-scale fishers and coastal Sámi inhabit is presented.

## 1.1 Research Questions

The main research question this thesis seeks to explore is:

- What factors contribute to the sustainable development of small-scale fisher and coastal Sámi livelihoods in northern Norway?

In exploring this question, further research questions are investigated:

- What characterizes small-scale fisher and coastal Sámi livelihoods in northern Norway?

- What are some of the challenges affecting them?
- What goals and aspirations do local people have about the future?
- And, what suggestions might help support opportunities for the sustainable development of these livelihoods?

## **1.2 Thesis Outline**

This thesis is organized into seven chapters. This first chapter is an introductory chapter that provides information on the topic, a statement of the problem and the relevance of the study. It also presents the research questions and this thesis outline. Chapter 2 explores methodological concerns and methods chosen, while chapter 3 describes the theoretical perspectives of sustainability that guide analysis in this thesis. Chapter 4 presents background knowledge relevant to the case study presented in the following chapter. Chapter 5 presents a case study exploring contemporary northern Norwegian small-scale fisher and coastal Sámi livelihoods on the island Spildra and factors identified as negatively influencing the sustainable development livelihoods on the island. Chapter 6 looks at the goals and aspirations people on Spildra had about the future and based on these suggests opportunities that may help the sustainable development of livelihoods on the island. Chapter 7 is the final chapter in this thesis and includes a summary of the key findings and analytical insights generated during this study, and suggests ways future research and academics might focus.

## 2 Methodological Concerns and Methods Chosen

The objective of this chapter is to briefly outline methodological concerns and methods chosen associated with this project. In doing so, qualitative and indigenous research approaches and strategies of inquiry used during the project are outlined, including selecting the topic; accessing the field; case study method; focus group interviews and open conversation; observation techniques; how literature was used; and ethical considerations.

### 2.1 Methodological Approach

#### 2.1.1 Why Qualitative Research?

Qualitative research is inductive, meaning research is explorative and proceeds towards theory<sup>6</sup> (Chilisa, 2012). Thus, the approach enabled the topic and research questions to be explored, and then appropriate theory selected. Qualitative research also enabled me to conduct research in a way conducive to my world-view. Inspired by indigenous scholars, I believe that research should be about showing reciprocity to those who share knowledge that we are dependent on to conduct research<sup>7</sup>.

Qualitative research is dynamic and results should be constructed during research (Seale, 2012). Consequently, the it allowed me to construct this project as my understanding of the topic(s) increased. The approach was also chosen because of its usefulness when working in physical closeness to people in field environments and effectively facilitate the flexible gathering of different kinds of information (Seale, 2012). Furthermore, because the topics explored were relatively new to me<sup>8</sup> and because qualitative research is “best for theory building and can involve diverse social constructs and theories that are novel and unique” (Chilisa, 2012, p.164). Consequently, the approach fits well with this study as it combines a sustainable livelihood approach - usually reserved for poverty eradication (Scoones, 2009) - in a Norwegian context.

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<sup>6</sup> As opposed to quantitative methods, in which theory is often used as a starting point and data is then analyzed based on the initial theory (Chilisa, 2012).

<sup>7</sup> Because an underlying goal of the research project was to help those facing challenges, this research project fits the mold of an applied research profile (Seale, 2012).

<sup>8</sup> Topics such as small-scale fishers, coastal Sámi and sustainable livelihoods.

### 2.1.2 What is an Indigenous Research Approach?

An indigenous research approach was used in this thesis for several reasons. Firstly, due to it being a requirement of this examination. Secondly, because several participants in the project were Sámi<sup>9</sup>.

It could be claimed the approach was born out of issues related to sustainable development. With the international indigenous movement first affirmed due to continued pressure from assimilation and resource development negatively affecting their communities, in 1975 the World Council of Indigenous Peoples was established to address the development and disposition of resources in indigenous people's territories (Jull, 2005). However, it is more likely the approach was founded in academia to counter longstanding historical misrepresentation and marginalization of indigenous peoples who had often been exoticized by western science (Chilisa, 2012; Smith, 2012; Evjen, 2009). Since at least 1973, scholars have developed an indigenous approach to research that asserts the facts that we live in a plural ontological world and rarely are their single truths about what constitutes knowledge (Wilson, 2009; Smith, 2012). Indigenous people centered, the paradigm incorporates indigenous and non-indigenous methodologies, and indigenous scholarship by both indigenous and non-indigenous researchers (Chilisa, 2012).

There is no single definition of what constitutes an indigenous research approach (Chilisa, 2012). While some emphasize a global scope (Wilson, 2009), others insist the local is where research lies (Smith, 2012). However, it is generally agreed that the concept of 'positionality' plays important role (Smith, 2012; Chilisa, 2012; Saugestad, 1998; Evjen, 2009). Positionality is a concept in social science that insists research should be conducted *by, with and for* research participants; as opposed to being *on* them (Saugestad, 1998). Additionally, scholars suggest that indigenous research should seek to incorporate informants into projects more as collaborators and work towards empowering informants in supporting their self-defined goals (Smith, 2012; Deloria Jr., 1999; Chilisa, 2012).

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<sup>9</sup> While informants self-identified to the researcher as Sámi, it cannot be assumed they would identify as 'a Sámi' in public. Informants also acknowledged Norwegian and Kven heritages. Due to limitations, see Olsen (2007) for understanding of the complexity of ethnic identification in northern Norway.

Deloria Jr. (1999) states that indigenous research fosters concepts of totality, holism and equality; asserting that indigenous cultures and ways of life are respected (1999). While Smith insists the extent to which loss has occurred and continues to occur for indigenous communities needs acknowledging; often due to colonial institutions and processes. Consequently, Smith asserts that within the paradigm academics are required to do critical revitalization work that seeks to identify and give volume to ‘silent communities of knowledge’ (2012). Indigenous communities need to often be ‘unchained’ in academia (Deloria Jr., 1999). In this was the approach could be considered applied research.

## **2.2 Strategies of Inquiry**

### **2.2.1 Choosing the Topic and Accessing the Field**

This section explores reasons for choosing the topic and outlines how access to the field was gained. Originally, I was planning to do comparative research that would allow Māori and Sámi experiences to be compared; either in co-management or on conflict resolution discourses. My reason for this was because I wanted to show reciprocity to ‘northern Norway’, while learn more about one of my own cultures. However, due to a change of circumstance this thesis is primarily focused on issues here in northern Norway<sup>10</sup>.

The topic choice came when Camilla Brattland of the Centre for Sámi Studies (SESAM) invited me to assist her on a research trip to Spildra in Spring 2016<sup>11</sup>. This opportunity introduced Spildra to me. During this trip, I talked with people about challenges they faced and my studies here at SESAM. This led to conversations around indigeneity and about involving local people in this research project; over which interest was shown.

After discussing with Camilla and my supervisor, Jorun Ramstad, about returning to Spildra to do fieldwork, I contacted Sigrid Isaksen and asked her if it was okay for me to return. She agreed and, later, offered accommodation in exchange for work while I was there. Sigrid and

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<sup>10</sup> I had been engaged with Te Rarawa Māori and Stat-oil pulled out of prospecting within Te Rarawa territory.

<sup>11</sup> In part, the project mapped fishing-grounds around Spildra. The maps produced would go on to influence a decision made which stopped the allocation of a new fish-farm off Spildra’s northern coast. See Brattland & Eythorsson (2016) for an overview of the study.

her husband, Trond, acted as valuable key informants during the field-work portion of this study.

### **2.2.2 Case Study Method**

Case study method is defined as an empirical form of inquiry that analyses a contemporary phenomenon in real-life settings. While often critiqued - partly due to its exploratory nature that can limit drawing generalities - it is used successfully to help solve problems and understand connectivity in communities (Yin, 2014). In this thesis, the method is utilized to assist my academic intentions to see how factors associated with sustainable development are related to Spildra. Furthermore, because it facilitates multi-disciplinary research, it effectively compliments the incorporating of a multidisciplinary perspective, as promoted in this master's program (Yin, 2014).

### **2.2.3 Focus Group Interviews and Open Conversation**

Six semi-structured focus group interviews were conducted on Spildra in August 2016 and included ten informants<sup>12</sup>. Interviews were influenced predominantly by recommendations of Spradley (1979) and Seale (2012). Consequently, questions were framed to help engage discussion around generalizations and experiences, and to encourage informants to use their own words. Focus group interviews took place in informant's homes and lasted between 45 and 90 minutes. All focus group interviews were recorded digitally and included note taking. Recorded interviews were transcribed. When relevant, after open conversations notes were also taken and all data gathered was stored in secure locations. The English language was predominantly used during interviews and, subsequently, the case study is bounded by this (Yin, 2014)<sup>13</sup>.

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<sup>12</sup> Seven men and three women.

<sup>13</sup> Bounding in this case study meant that informants (unit of analysis) were selected initially based on their English ability and, consequently, results were affected by this. Still, for those who spoke English fluently, they might have had difficulty in fully expressing themselves, statements might have been shorter, perhaps not as detailed and/or as complete as they might have been in Norwegian. However, in the end, two interviews were conducted in Norwegian with the help of Kurt Olsen who provided translation assistance during interviews involving his father, Roger Olsen, and his uncle, Jarle Olsen.

#### **2.2.4 Observation as Method**

Observation methods used were both passive, through watching and listening, and active, by asking questions. Observation required me to take part in events and take field notes directly after events occurred, describing what had happened (Seale, 2012), and be aware of ethical implications the method can have on data gathering. Thus, I aimed to be attentive at specific times and localities, and tried not to influence informants any more than necessary; as recommended by Spradley (1979).

#### **2.2.5 Literature in Use**

Literature has formed a key part of this research project. As Seale's (2012) advises, primary sources are used because of their relevance to the time and place of the phenomena being studied, while secondary sources because of their ability to provide background knowledge of what is being researched. By using both types of literature this research has been provided with added credibility and representability, and extra lines for academic elaboration. While no dedicated section in this thesis is given to a 'literature review', literature is, instead, engaged with and authors situated as and when relevant as a method recommended; as by Seale (2012).

### **2.3 Ethical Considerations**

Because factors of politics and power affect the role of a researcher (Seale, 2012; Chilisa, 2012; Smith, 2012) these concepts were considered important from the outset. Hence, attention was given to the concept of 'reflexivity'; of affording an explicit awareness onto the various positions that I as a researcher might hold (Chilisa, 2012). Reflexively, being an 'outsider' - i.e. not being from the community and not being Norwegian - has affected the research. Conversely, being an 'insider' - i.e. being indigenous and being a supporter - has also affected the research. Moreover, the way the community received me as a researcher and my own cultural bias and values has affected the research. However, giving attention to these ethical considerations has helped mitigate and adapt to dilemmas associated with social research.

In addition, a first aid and a field security course were completed prior to the study commencing, as well as ethical clearance from the Norwegian Centre for Research Data (NSD).

#### **2.3.1 The Question of Naming**

A major ethical challenge in this project concerned the question of naming. Chilisa (2012) states, "[o]ne of the most important ethical considerations in indigenous research interviews is that participants should decide if their names can be used in the research" (p.221). However,



this raised a critical question, in relation to the moral premise of reciprocity, in writing this thesis: Should the real names of informants be used even if they have given permission to do so? While there are occasions when researchers should keep informants anonymous, others are conducive to the use of real names; especially in an indigenous research paradigm (Chilisa, 2012; Smith, 2012). For instance, in a relational ethical framework, a researcher may want to use the names of people they work with so that others know who they are reading about (Wilson, 2009). In addition, from a personal relationship standpoint, the power of informants' voice and the information they impart might be lost if researchers choose to make them anonymous; this potential disadvantage may be why informants want their names used (Chilisa, 2012). Furthermore, while acknowledging this goes against most 'implicit ethical rules', as Wilson (2009) critically asserts, how can a researcher be relationally accountable to informants if their real names are not used?

Based on these ethical understandings, in this thesis, I have chosen to use the real names of informants<sup>14</sup>. It must be noted, however, that this has not been an easy choice; even though all informants whose names have been used gave prior permission<sup>15</sup>.

## **2.4 Chapter Summary**

The objective of this chapter was to briefly outline how methodological concerns and the methods selected have been incorporated into this research project. In accepting that I needed to learn these research tools and practice them to the best of my ability, the considerations and choices outlined in this chapter have formed a solid methodological basis for this project. Moreover, this knowledge has helped mitigate stress, avoid conflict and becoming 'lost' during the research process.

The next chapter outlines the main theoretical perspectives used in latter parts of this thesis.

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<sup>14</sup> Because of this decision, it is advised that informants are communicating as private persons and not as representatives of any organization or business. Moreover, certain data has not been published due potential negative implications.

<sup>15</sup> Consideration has been made to NSD requirements about sensitive personal data and efforts made to avoid harm, coercion or susceptibility of informants through the information provided in this thesis.

## **3 Theoretical Perspectives**

This chapter outlines the main theoretical foundations that frame analysis in this thesis. Thus, presented and explored are the concepts of ‘sustainability’ and ‘sustainable development’, ‘a sustainable livelihoods approach’ and the analytical tool of ‘the sustainable livelihood framework’.

### **3.1 What is Sustainability and Sustainable Development?**

As a topic sustainability is generally related to climate and environmental problems linked to processes of development and modernization. As a concept, however, sustainability focuses environmental, social, political and economic factors and helps researchers seek to address many types of imbalances and injustices produced primarily by the exploitation of natural resources. Moreover, the concept of sustainable development is often used to explore the effective use and misuse of natural resources and contribute to local, national and global discussions about how to best manage natural resources (Brundtland, 1987; United Nations, 2016; Hersoug, 2005). Still, sustainability is more than just a concept, it describes the lived realities and concerns of many, and it is an organic evolutionary part of living culture and society, integral to many self-determining political and economic communities (Jull, 2005).

#### **3.1.1 Modern Sustainability: The Brundtland Report and Indigenous Peoples**

The Brundtland Report (Brundtland, 1987) was published in 1987 by the World Commission on Environment and Development (WCED), chaired by then Norwegian Prime minister Gro Brundtland, due to a growing concern over increasing rates environmental degradation and is acclaimed to have cemented the popularity of sustainable development internationally as a political statement and instrument (Kalland, 2003; Jull, 2005). In defining sustainable development, the report states: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 54). As a standard and a goal - while often used as an empty cliché - sustainable development had immediate effect worldwide (Jull, 2005). One key concept promoted in the report is that technological and societal limitations must be set to environmentally meet the needs of today, while factoring in the needs of future generations (Brundtland, 1987). Sustainability has thus become almost like a political icon for

environmental policy. In this respect, the report is a document and guideline for political decision making.

In its section specifically related to indigenous people, it is acknowledged that while processes of modern development slowly entangle many indigenous communities into larger economic frameworks and societal structures, some remain relatively isolated because of physical barriers. In doing so, it makes significant connections to eco-cultural - cultural and nature-based - systems (Jull, 2005). Because of its relevance to discussion in this thesis a detailed presentation of the section follows. The report states

The isolation of many such people has meant the preservation of a traditional way of life [...]. Their very survival has depended on their ecological awareness and adaptation. [...] With the gradual advance of organized development into remote regions, these groups are becoming less isolated. Many live in areas rich in valuable natural resources that planners and 'developers' want to exploit, and this exploitation disrupts the local environment so as to endanger traditional ways of life. [...] Social discrimination, cultural barriers, and the exclusion of these people from national political processes makes these groups vulnerable and subject to exploitation. Many groups become dispossessed and marginalized, and their traditional practices disappear. They become the victims of what could be described as cultural extinction. (pp. 97-98)

Furthermore, because of potential problems associated with development on indigenous communities, the report adds,

These communities are the repositories of vast accumulations of traditional knowledge and experience that links humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems. It is a terrible irony that as formal development reaches more deeply into rain forests, deserts, and other isolated environments, it tends to destroy the only cultures that have proved able to thrive in these environments. The starting point for a just and humane policy for such groups is the recognition and protection of their traditional rights to land and the other resources that sustain their way of life – rights they may define in terms that do not fit into standard legal systems. These groups' own institutions to regulate rights and obligations are crucial for maintaining the harmony with nature and the environmental awareness characteristic of the traditional way of life. Hence the recognition of traditional rights must go hand in hand with measures to protect the local institutions that enforce responsibility in resource use. And this recognition must also give local communities a decisive voice in the decisions about resource use in their area. Protection of traditional rights should be accompanied by positive measures to enhance the well-being of the community in ways appropriate to the group's life-style. (p.98)

Additionally, in providing advice on how to deal with problems facing many indigenous communities, the report states;

In terms of sheer numbers, these isolated, vulnerable groups are small. But their marginalization is a symptom of a style of development that tends to neglect both human and environmental considerations. Hence a more careful and sensitive consideration of their interests is a touchstone of a sustainable development policy (1987, p.98).

Notably, in the case of coastal Sámi the report outlines an international defense in emphasizing the need for the sustainable development to be sensitive to their culture. Therefore, the report can potentially aid overcoming political challenges communities might face in relation to development policy; because the concepts of sustainability and sustainable development are now vital political instruments.

### **3.2 Sustainability and Research**

Especially ‘post-Brundtland’, academics have engaged conceptually with sustainability. Research has, for instance, focused on adaptation and ecological management (i.e. Birkes, 2007; Scoones, 2009), while others have explored the concept theoretically (i.e. Kalland, 2003; Sen, 2013). These two perspectives of sustainability in research are described in the following sections.

For many researchers, sustainability instills notions that it is possible for people to live in harmony with their environment in models that Kalland (2003) states position “man and nature co-existing on some kind of homeostatic equilibrium” (p.161). Because of this some researchers have contributed to upholding the positivist notion of ‘the noble savage’ - a notion both heavily criticized, yet nourished by anthropologists - and the rise in interest of indigenous perceptions on sustainability and the environment. An indigenous world-view often modeled in academia as eco-centric and holistic<sup>16</sup>, starkly contrasting an anthropocentric and atomistic view which generally dominates science (Kalland, 2003). Kalland reasons that anthropologists can make important contributions to the science of sustainable development. Firstly, by providing links between knowledge regimes - between indigenous, traditional or local knowledge and those of scientific knowledge - and different interpretations of knowledge they can help provide more in-depth understandings of problems. Secondly, by understanding that resource management is fundamentally a social matter, not a relationship between nature and people, they can engage in areas of planning and monitoring within management organizations (2003). Berkes (1988) insists that for sustainability to be achieved, resource management teams need (1) appropriate

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<sup>16</sup> Holistic in the sense that things relate to and are entangled with other things.

local ecological knowledge and appropriate technology, and (2) have environmental ethics that restrict their want to over-exploit.

However, neither sound environmental ethics nor profound environmental knowledge alone is able to prevent unsustainable management. Consequently, cautious steps need to be taken when inducing environmental practices from philosophical traditions (Kalland, 2003; Berkes, 1988). As Kalland cautions, people should not be surprised by discrepancies made between practice and theory, and not assume norms and perceptions are mirrored by behavior; stating “if such a connection is present this is not necessarily a result of ecological understanding and a conscious conservation but might be a coincidental side-effect of something else” (p.171). He argues that it is too simplistic to blame the problems of the world on western world-views or cultural misfits, insisting that all knowledge systems have conflicting values. Furthermore, he states that while encouraging norms for the preservation of natural resources, knowledge systems can provide easy means of circumventing norms. Consequently, he maintains, behaviors based on ideology may lie in selectively choosing evidence and insists instead of “norms determining behavior”, researchers should find “that goal-orientated behavior is legitimised by appealing to certain norms” (2003, p.171).

When the focus is shifted from natural resources to people, sustainability also highlights important issues, such as intergenerational justice and freedom. Therefore, a freedom-orientated perspective provides reasoning to value when research includes concepts liberty and self-determination (Sen, 2013). Sen (2013) states that because of sustainability’s potential, a robust concept of sustainability must aim for the sustainable development of non-material needs and not solely on the ability to meet perceived material needs.

### **3.2.1 Sustainable Livelihood Perspectives**

In pioneering the concept of ‘sustainable livelihood’, Chambers and Conway (1991) define sustainability as “a function of how assets and capabilities are utilized, maintained and enhanced so as to preserve livelihoods” (Chambers & Conway, 1991, p. 9). Central to the livelihoods perspective are concepts of self-reliance and self-sufficiency (Morse & McNamara, 2013). A livelihood is considered sustainable if it has the capabilities to maintain natural resources long-term and resilient when it can overcome challenges by not requiring external support, and does not weaken other livelihoods (Scoones, 2009). While few livelihoods could be regarded as sustainable - economically, environmentally, socially and institutionally - today,

it is an important moral goal; in that sustainable development should enhance people's well-being and livelihoods long-term (UK Department for International Development, 1999).

However, trade-offs between sustainability and economic livelihood outcomes is a main challenge. Research identifies that tensions arise; between people's priorities and their values; between environmental concerns (i.e. stopping ocean degradation) and requirements for enhanced livelihood security; between safeguarding against problems long-term (i.e. climate change) and maximizing profits short-term; and between not weakening the livelihood opportunities of others (i.e. restricting access to water) and achieving household livelihood goals (UK Department for International Development, 1999). While tensions like these are not overcome easily, research can facilitate effective knowledge production on factors that contribute to achieving sustainable livelihoods.

While research may begin with people, the environment should not be compromised. Thus, a strength of a sustainable livelihood perspective is 'mainstreaming' the environment in holistic frameworks (Carney, 2000). However, mainstreaming sustainability is far from being successful. It is argued this is partly due to scientists' failings to shift focus beyond short-term coping and adaptation strategies, and because in a lot of research the element of sustainability has been weak; often by not attempting to explore factors that could undermine livelihood sustainability long-term (Scoones, 2009). Scoones suggests to overcome shortfalls like these a futures-orientated perspective that identifies a range of possible strategies is required (2009). Thus, a futures-orientated sustainable livelihood approach is used to explore the sustainable development of small-scale fisher and coastal Sámi livelihoods in the North.

### **3.3 The Sustainable Livelihood Approach**

The Sustainable Livelihood Approach (SLA) is a broad theoretical research framework for building knowledge on complex facets associated with livelihood sustainability. Characteristic of the approach is that it locates people and their priorities, as defined by them, at the center of analysis, in providing space for analyzing problems, anxieties, vulnerabilities, worries and feelings of losing control people might have. Moreover, the approach enables exploration of non-material factors like agency and opportunity based on local world-views. (Morse & McNamara, 2013). Drawing on a critical multidisciplinary perspective, SLA is a holistic analytical research tool that offers a way to understand how people in different places live their lives (Scoones, 2009). A 'sustainable livelihood' is defined as:

A livelihood comprises people, their capabilities and their means of living, including food, income and assets. Tangible assets are the resources and stores, and intangible assets are claims and access. A livelihood is environmentally sustainable when it maintains or enhances the local and global assets of which livelihoods depend, and has net beneficial effects on other livelihoods. A livelihood is socially sustainable which can cope with and recover from stresses and shocks, and provide for future generations. (Chambers & Conway, 1991, p. i)

Additionally, the concept of ‘sustainable livelihood security’ is defined by the WCED as,

Livelihood is defined as adequate stocks and flows of food and cash to meet basic needs. Security refers to *secure ownership* of, or access to, resources and income-earning activities, including reserves and assets to offset risk, ease shocks and meet contingencies. Sustainable refers to the maintenance or enhancement of resource productivity on a long-term basis. A household may be enabled to gain sustainable livelihood security in many ways – through ownership of land, livestock or trees; rights to grazing, fishing, hunting or gathering; through stable employment with adequate remuneration; or through varied repertoires of activities. (in Chamber and Conway, 1991, p.5)

Importantly, this latter definition while including concepts of security - of secure ownership - also provides advice on ways communities can gain security for their livelihoods.

### **3.3.1 Origins of the Approach**

The origins of SLA trace back to areas such as resilience studies, village studies and political ecology (Scoones, 2009). Since first being discussed in depth by Chambers and Conway (1991), several development agencies<sup>17</sup> have implement their own forms of SLA, predominantly used in poverty eradication programs (Carney, 2000). SLA continues to be central in a lot of rural development understanding (Scoones, 2009). It is therefore relevant to this study which is conducted in the rural community on Spildra. SLA also draws influence from participatory, actor-orientated and ‘grass root’ modes of research, and is inspired largely by Sen’s (1981) work on entitlements and deprivation. Thus, it provides space for critical reflection that “knowledge production is always conditioned by values, politics and institutional histories and commitments” (Scoones, 2009, p.14) and, consequently, the normative framing of this thesis.

Krantz (2001) says SLA is akin to ‘acupuncture’, in that researchers attempt to put the ‘pins’ in effective places, as often an objective is to suggest entry points in which alleviation strategies might be applied. By focusing on capabilities - as proactive and dynamic - researchers aim

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<sup>17</sup> For instance, the United Nations Development Program and OXFAM (Scoones, 2009).

towards what people can be and what people do, and on helping themselves improve their quality of life and their ability to cope with risks and shocks (Chambers & Conway, 1991). Practically, SLA typically produces knowledge that is aimed to fit within research-based policy initiatives that aim to alleviate communities’ most pressing constraints (UK Department for International Development, 1999). In addition, while it is stressed that, “as global transformation continues apace, attention to scale issues must be central to the reinvigoration of livelihood perspectives” (Scoones, 2009, p.17), I interpret this to mean that in the case of communities in which coastal Sámi live, an important objective might be to incorporate an indigenous rights-base perspective to problem-solving, which I take in chapter 6. But, what tools can be utilized in a SLA approach to research?

**3.3.2 What is The Sustainable Livelihood Framework?**

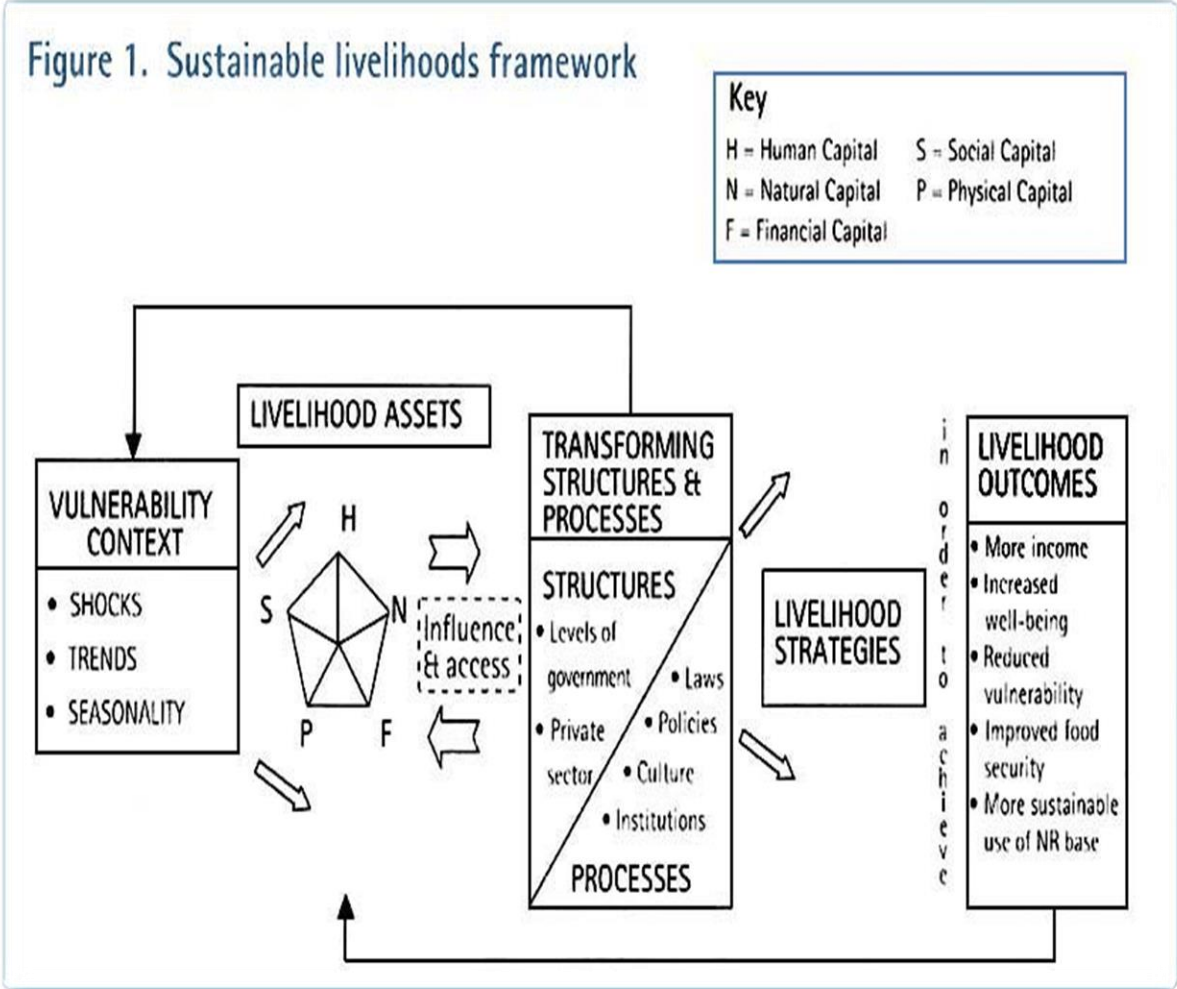


Figure 1. Sustainable livelihoods framework (The UK Department for International Development, 1999, p,1)



As an analytical tool in SLA work, the sustainable livelihood framework (SLF) is used to understand interconnected factors which influence and contribute to the sustainable development of people's livelihoods. However, due to limitations, in this thesis only those elements considered necessary to answer the research questions are addressed. Nonetheless, it is considered necessary that the reader is provided with an overview of the framework to enable them to understand how the model work; as it will be extensively referred to later in this thesis.

### **Vulnerability Context**

On the left of the model the 'vulnerability context' (VC) is displayed. The VC consists of external factors that may enhance or lessen access to assets over the short to medium-term. Importantly, local people are often not able to control factors located within this context (UK Department for International Development, 1999). By understanding local knowledge of historical events associated with factors within the VC can contribute to being able to predict future events. Factors contributing to the VC externally are risks, stresses and shocks that livelihood assets are exposed to, while internally, defenselessness may reduce people's capabilities to cope without incurring an irreversible loss.

Futures-orientated, the VC is often applied to assessing livelihood sensitivity to projected problems. Subsequently, severity is identified by analyzing people's ability to manage exposure to different factors. For instance, new resource users and/or restrictions on access. Adequate knowledge of the indirect means through which problems might be reduced - including building resilience and self-reliance - is considered vital to using the rest of framework beneficially. Notably, the VC is directly influenced by transforming structures and processes (Scoones, 2009).

### **Livelihood Assets**

The 'livelihood assets' (LA) section is next. LA are the assets people use in combination to create livelihoods and often referred to as 'capitals' and 'resources'. Importantly, assets include resources that enhance people's capabilities (Scoones, 1998); including claims and rights available. LA also make transformation and reproduction possible; providing people with the agency to change and challenge rules - i.e. rules that govern resource use (De Haan, 2010).

Access and claims are core dimensions of LA<sup>18</sup>. Scoones defines LA as; natural resources, including stocks and environmental services useful to derive livelihood; financial resources, including the economic base essential for pursuing different livelihood strategies; physical assets, including essential infrastructure; human capital, such as skills, labour, health and knowledge important for successfully pursuing livelihood strategies; and social resources, including the “resources [...] upon which people draw from when pursuing different livelihood strategies requiring coordinated actions” (2009, p.8).

A lack or a presence of LA determines the severity of vulnerability within the framework. Research shows, a lack of infrastructure, i.e. transport can negatively affect a person’s livelihood, because their ability to travel and sell produce is reduced. Within the framework, challenges like this are labelled as dimensions of poverty<sup>19</sup>. Central to an analysis using the model is to identify what resources are essential for enhancing people’s livelihood strategies (Scoones, 1998).

### **Transforming Structures and Processes**

Transforming structures and processes (TSPs) are next. TSPs affect livelihoods because they influence the level by which different factors - i.e. government, the private sector, policies and institutions - are concerned about them. In the case of institutions - or organizations that enforce or make use of institutions - factors could be the values and rules that shape people’s behavior and can be located at all geographic, political, economic, social and legal scales. Socially, informal institutions are shaped by cultural customs and traditions that determine social relationships, while formally they shape, for instance, trade rules and laws. Institutions extensively accepted and used define how actions are structured through the norms and rules of a society; including developing and implementing services, legislation and policy (Morse & McNamara, 2013).

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<sup>18</sup> Access is the capacity to use services and resources. While claims, the appeals and demands available for moral, material or other practical access and support; often made during times of contingency (Chambers and Conway, 1991).

<sup>19</sup> Poverty defined as a comparative disadvantage due to increased efforts required to meet livelihood outcomes (UK Department for International Development, 1999).

Additionally, TSPs shape to what extent people can gain access to and use of certain assets (Scoones, 2009). Importantly, TSPs are accessible to local people to potentially change as they are dynamic and continually developing (UK Department for International Development, 1999).

### **Livelihood Strategies**

Next are ‘livelihood strategies’ (LS). LS are the choices available that enable people to meet livelihood goals. Depending on the resources they have access to, including claims available, people peruse different livelihood strategies. LS include short-term consideration and avoiding problems long-term; both positive and negative. For instance, they might help foster resilience or they might erode the resource base available. LS include options of intensification, extensification, migration and diversification (Scoones, 1998).

### **Livelihood Outcomes**

The last section represents ‘livelihood outcomes’ (LO). LO in the model are the opposite of poverty and result from livelihood strategies (Scoones, 2009). Local goals are central to an analysis of potential LO. Central to LO is human-centered sustainability, thus, enhancing LO using the SLF may be at the expense of the environment. Carr (2013) states that non-monetary LO critical to well-being - such as self-determination and freedom - need incorporating into analysis if sustainable livelihoods are to be achieved (Morse & McNamara, 2013).

### **3.3.3 Critique of the Approach**

SLA is critiqued as being too economic and concrete. Since deprivation is not exclusively a matter of income, research shows that livelihoods provide for both material and social goals (Carr, 2013. De Haan, 2012). Research shows that people’s social goals actually come before material ones. Consequently, Carr states SLA researchers need to move beyond instrumental approaches and incorporate the concept of ‘intimate government’ (2013). Intimate government promotes the idea that research should look towards “local efforts to shape conduct to definite, shifting, and sometimes contradictory material and social ends” (, p.78), and be attentive to dominant hegemonic perspectives on livelihoods within governance, especially in relation to minority groups (Carr, 2013).

Critics also argue that adopting more encompassing views on livelihood goals is crucial to effective SLA research; as often power relations are not explored, including inclusion and exclusion – as livelihoods are not neutral (De Haan, 2012). One way to counter this is to

move beyond the local level to examine wider structures of inequality. Basic questions of political economy and history matter: the nature of the state, the influence of private capital and terms of trade, alongside other wider structural forces, influence livelihoods in particular places. This is conditioned by histories of places and peoples, and their wider interactions with colonialism, state-making and globalization. (Scoones, 2009, pp. 15-16)

Critics also assert SLA literature often uses the concepts of power and politics softly, and presume a more theoretical concern for people (Scoones, 2009). Power can be strategically useful, because through exploring political and social realities strategic understanding can increase, and, long-term, power shapes relationships and people's capabilities (Unsworth in Scoones, 2009). In addition, critics asserts research today is required to integrate climate change into analysis, because it is predicted to greatly affect livelihood outcomes in the future (Scoones, 2009). Additionally, that SLA research must avoid bias towards the local and interactions in the local-global need analyzing if the true complexity of livelihoods are to be captured (De Haan, 2009).

### **3.4 Chapter Summary**

The objective of this chapter has been to outline the theoretical perspectives used to guide analysis in this thesis. Importantly, a sustainable livelihood perspective should not be thought of as a simple step-by-step guide to problem-solving. Moreover, a futures-orientated perspective is required to make research relevant and applicable. The theoretical perspectives presented in this chapter are proven to hold power for research to be applied in assisting real-life problems. In this respect, a sustainable development paradigm is recognized as a legitimate political instrument for achieving glocal goals<sup>20</sup>.

The flowing chapter explores historical background knowledge and sets the pretext for the case study examining contemporary livelihoods presented in Chapter 5.

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<sup>20</sup> Glocal is defined as an adjective “having features or relating to factors that are both local and global” (Oxford University Press, 2017).

## 4 Coastal Livelihoods in the North

This chapter explores background knowledge relevant to historical factors contributing to small-scale fisher and coastal Sámi livelihood in northern Norway. This is considered important because factors such as these are often neglected in sustainable livelihood research (Carney, 2000). The chapter is organized into five sections that explore factors relevant to demographic, adaptational, indigenous knowledge, colonization and industrial development.

### 4.1 Demographic Understanding

Northern Norway has been inhabited for at least 10,000 years (Ojala, 2009; Pedersen, 2012). Sámi are the longest ethnic group continuously settled in the region, having settled 2,000 to 3,000 years ago (Ojala, 2009). A report by the Norwegian chief Ottar in the 9<sup>th</sup> century states only Sámi were seen inhabiting the coast north from Finnmark (Pedersen, 2012).

For at least 700 years the region has been multi-ethnic. Norwegian settlers joined Sámi in the region from the around the 13<sup>th</sup> century. However, while Norwegian populations decreased in the 15<sup>th</sup> century, coastal Sámi populations continued to grow due to their more resilient livelihood strategies that utilized different resource niches and were relatively self-sufficient, meaning not as dependent on outside provisions (Hersoug, 2005; Hansen, 2006). Additionally, Russians, Swedes and Kven - coastal Finns in Norway - have cohabitated parts the region for centuries. Russians and Swedes from at least the 16<sup>th</sup> century (Schrader, 1988), while Kven since at least the 17<sup>th</sup> century (Niemi, 2009).

Moving rapidly forward, from 1835 to 1900 northern Norway's population rapidly increased, primarily due to immigration from the south (Hersoug, 2005). Troms County, for instance, grew from an estimated 26,861 in 1835 to 74,499 in 1900 (Statistics Norway, 2001)<sup>21</sup>. As of 2015, 5,165,802 people lived in Norway (Statistics Norway, 2015), with 402,248 living in the northern Norway (Statistics Norway, 2016). It is estimated that most Sámi live in Troms and Finnmark Counties (Brattland, 2012)<sup>22</sup>. The population of Kvaenangen municipality was 1,226

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<sup>21</sup> In 2001, the population of Troms County was 151,646 (Statistics Norway, 2001).

<sup>22</sup> As for actual numbers of Sámi statistics are lacking due to ethnic data not being collected as census data in Norway. The Norwegian Sámi Parliament had 15,358 registered voters in 2015

in 2015 (Statistics Norway, 2015). With the population on Spildra decreasing from an estimated 100 in 1967, 45 people in 1990, to 23 in 2017 (T. Isaksen, personal communication, April 30, 2017).

## **4.2 Patterns of Ecological, Economic and Social Adaptation**

In northern Norway, marine resources have always been vital (Pedersen, 2012). Since at least the 15<sup>th</sup> century, livelihoods in the region have also been based on hunting - for birds, reindeer and sea mammals – and gathering, animal husbandry, agriculture, and other land based jobs like building (Bjorklund, 1991; Pedersen, 2012). 16<sup>th</sup> century tax records show coastal Sámi extensively trading in institutionalized trade forms involving different trade and merchant groups (Hansen, 2006).

Fishing has always happened year-round, although winter the main season; due to the cold weather facilitating fish migration and fish drying (Bjorklund, 1991). Along with reindeer, cod have been one of the most stable resources for coastal livelihoods. Every winter Arctic cod arrive from the Barents Sea to spawn along the coast (Bjorklund, 1991). While, within the fjords, non-migratory ‘indigenous cod’, have also been a crucial livelihood asset (Bjorklund, 1991; Brattland, 2012; Davis & Jentoft, 2005). Traditionally, cod have been sold fresh or dried and sold as Klipfisk.

It could be said that community-based natural resource management practices in combination with small populations have seen local communities in northern Norway historically manage marine resources in sustainable ways; using local and indigenous management strategies that ensured the carrying capacity of eco-systems were never reached (Bjorklund, 1991).

The numbers of registered fishing vessels have declined steadily in Troms during the period 1980-2016; in Maslev municipality 34-0; Kvaenangen 292-19; Karlsoy 458-120; and Skjervoy 454-65 for instance (Fiskeridirektoratet, 2017). In 2016 24 registered commercial fishers lived in Kvaenangen (Fiskeridirektoratet, 2016). Six of whom participated in this study.

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(Samediggi, 2015). However, it is widely speculated that there are between 40,000 and 100,000 people of Sámi decent living in Norway today.

### **4.3 Mea: Indigenous Natural Resource Management**

‘Mea’ is a coastal Sámi knowledge system that can be compared to a modern day marine tenure system. Studies in the 1920s and 1930s show how people on Spildra and in neighboring communities collaborated the informal community-based resource management system. Research shows Mea included managing small fleets of boats, longlines, gillnets and hand lines. Furthermore, held within the Mea system were vast amounts of indigenous knowledge; including classification forms and cultural taxonomies. Importantly, as an institution Mea was vital in sustaining marine resources in the best interests of local communities collectively (Bjorklund, 1991).

Through Mea, local people developed and implemented policy around *who, what, how, when* and *where* people could extract resources. Mea provided access for all local people to fish; including open-access to red-fish, coal-fish and herrings. Furthermore, it regulated not only individual household access reserved for line-fishing and gillnetting, but also provided regulation for harvesting seabirds, dugongs and seals. Additionally, Mea was important in providing strategy for fishing migratory haddock and cod stocks, and policy for sanctions issued to people who, for instance, fished un-allowed in certain fishing spots (Bjorklund, 1991). It is assumed that local communities who practiced Mea had clear perceptions of exclusivity and ownership - fundamentals of sustainable livelihood security - over the resources they utilized; rights and claims considered to have been obtained through centuries of continuous use (Bjorklund, 1991; Hersoug, 2005; Davis & Jentoft, 2005). It could be suggested Mea was a marine-resource management system developed and implemented by local people in commons.

However, the practice of Mea has been devastatingly decimated. It could be suggested this is due to systematic acts of colonization and hegemonic cultural imperialism by authorities located in the south. Consequently, the Mea system has been overlooked in state-centered marine resource management policy.

### **4.4 Politics: Colonization through Time**

It could be claimed, in the 17<sup>th</sup> century Crown authorities in the south first became interested in sustaining northern livelihoods. It is documented that since this time northern people have engaged with southern authorities about issues relating to the management of local marine resources. Thus, it is suggested that authorities attempted to restrict resource access to protect local livelihoods against intensified settlement. The colonial doctrine that dominated during

this time was ‘closeness guarantees rights’. Thus, northern communities were provided with preferential rights by the Crown to access marine resources to sustain their ways of life (Hersoug, 2005). Two documents are cited as acts intended to, it might be suggested, positively discriminate in favor of - protecting northern livelihoods; The 1751 Lapp Codicil is celebrated as the founding document of the Lappish Nation<sup>23</sup>, while the 1775 Land Acquisition Decree formalized local rights to saltwater fishing in northern areas (Pedersen, 2012).

Under colonization, fjords, like the rest of Norwegian territory, have been regarded by government authorities as the property of the Crown. With the Norwegian nation-state established in 1814, access to land gradually became privatized through a national property system<sup>24</sup>. However, fjords remained common property and under Crown ownership (Bjorklund, 1991). Coinciding with settler populations growing, in the 1830s fisheries laws were passed that sought to, again, restrict access for ‘non-locals’<sup>25</sup> (Hersoug, 2005).

Colonization can be seen to have affected small-scale fisher and coastal Sámi livelihoods positively and negatively. While negative, especially through processes like privatization and Norwegianization<sup>26</sup>, some colonial acts were positives, for instance The Lapp Codicil. History suggests that increased colonial entanglement has seen efforts made by authorities - Sámi and non-Sámi - to avoid the unsustainable development of marine resources, that emerged, however, only after local voices were raised in protest (Hersoug, 2005; Pedersen, 2012; Nilsen, 2005).

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<sup>23</sup> The Lapp Codicil resulted from the border between Norway and Finland being established. The Codicil saw the establishment of the Lapp Court; within which Sámi held legitimate authority.

<sup>24</sup> Privatization also included making land within a Siida - a Sámi institution comparable to a village or a community - property.

<sup>25</sup> It is thought that restrictions were in part to limit the Pomor trade which involved extensive trade with Russia and continued up until at least the Russian revolution and, subsequently, the border closing between Norway and Russia (Hersoug, 2005).

<sup>26</sup> Norwegianization is a term used for assimilative policy that discriminated against Sámi and Kven from the 1800s up until, arguably, the 1980s. The policy, based on social Darwinian ideology, sought to ‘civilize’ and ‘save’ ethnic minorities through principles of ‘equal rights’ based on the principal of sameness (Lehtola, 2004). Assimilation was common around the world where colonization impacted indigenous peoples. For comparison see Minde (2005), Smith (2012) and Deloria Jr. (1988), who write on Sámi, Māori and Native American experiences respectively.



## 4.5 Development in Fisheries

### 4.5.1 Post War Years and Fishing Developments

Many communities in northern Norway were devastated after WWII and rebuilding efforts adversely bypassed many communities based inside fjords (Hersoug, 2005). It was during this period that large-scale industrial fishing was given major lifts - legally and technologically - and was favored by the government over small-scale fishers. Preferential treatment was given to large-scale fishers because capital-intensive fishing was the preferred industry to supply growing consumer markets in the south. These developments resulted in large-scale fishers exploiting waters used by small-scale fishers and coastal Sámi, and devastated some fish stocks in the region<sup>27</sup>. As a response, local fisher organizations protested regarding the unsustainable resource practices affecting local access to resources<sup>28</sup>. State authorities responded discriminatorily, stating that not only was large-scale fishing legal but was also encouraged; with economists within the Norwegian Department of Fisheries stating that small-scale fishers - who also enjoyed new technologies - were old fashioned, claiming the future of fishing was in large-scale fishing (Hersoug, 2005).

Since at least the 1960s, state-centered fisheries management in Norway has used an evidence-based approach and based on common property theory<sup>29</sup>. A management paradigm that, it could be suggested, has caused disruptions to and problems for many northern communities. For instance, centralized management policies have made ‘institutionally invisible’ many local and indigenous knowledge systems, including Mea. Consequently, locals whose livelihoods rely on marine resources have lost a lot of control over being able to successfully manage their livelihoods<sup>30</sup> (Pedersen, 2012; Davis & Jentoft, 2005; Bjorklund, 1991).

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<sup>27</sup> Herring stocks, for instance, were almost made extinct (Hersoug, 2005)

<sup>28</sup> While pushed by Sámi fishers, others also joined; especially when is concerned discussion around foreign boats (Hersoug, 2005).

<sup>29</sup> Common property theory assumes resources - including water and fish - is in principle property of ‘no-one’ and access to resources is available for all citizens to access. In turn, the nation-state retains exclusive legal jurisdiction over marine-resources in Norway (Hersoug, 2005).

<sup>30</sup> Around the same time the state policy of welfare was introduced and, subsequently, large-scale urbanization saw many leaving small communities in favor of cities because of

Control over livelihoods was challenged further in the 70s and 80s; particularly in relation to increasing specialization of the fishing industry, which hit communities, especially those in remote fjords, severely. Combined with continued policies of Norwegianization, this resulted in some fishers finding it difficult to participate in the new fisheries regimes and associations<sup>31</sup>, and small-scale fisher numbers being a mere fraction of what they had been in the 1950s (Nilsen, 2005).

#### **4.5.2 The Crisis of Quota Introduction**

From the late 1980s, many northern Norwegian communities lost further control to participate in managing resources that formed their livelihoods; marine resources<sup>32</sup>. The ‘great cod crisis’<sup>33</sup>, for instance, saw an individual vessel quota system introduced which specifically targeted cod - arguably the most important natural resource for northern communities - and severely impacted the small-scale fishing industry<sup>34</sup> (Pedersen, 2012). This policy development meant the end of thousands of years of the relative autonomy of local people accessing marine resources and combined with other factors the resource management change literally brought “a number of communities to the limits of survival” (Hersoug, 2005, p. 191). Accordingly, the Norwegian Sámi Parliament, local fisher organizations and others have acted, and continue to act, to try and change transformational structures and processes to ensure the survival of coastal communities. For the Sámi Parliament, action has been specially focused in areas which locals have claims for protection to ensure the sustainable development of small-scale fisher and coastal livelihood (Broderstad, 2003; Brattland, 2012; Nilsen, 2005; Davis & Jentoft, 2005).

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increased employment and education opportunities. Consequently, over time many ports in fjords were closed as the numbers of small-scale fishers were reduced (Bjorklund, 1991).

<sup>31</sup> A trend comparable to changes in agriculture, where specialist full-time farmers were given preferential treatment in farming associations and minority small-holders relatively alienated (J. Ramstad, personal communication, no date).

<sup>32</sup> It was during this period that Sámi gained official recognition as an indigenous people and the Sami Parliament was established.

<sup>33</sup> The crisis saw the 1989 cod season close early due to the maximum quota being reached. It severely affected small-scale fishers and many had not yet taken a substantial amount of fish (Hersoug, 2005).

<sup>34</sup> Within the three-year period leading up to the policy being enforced, many local fishers were unable to lease quotas offered because they had too small of a boat and/or due to ecological problems, such as seal invasion (Pedersen, 2012).

## 4.6 Chapter Summary

The objective of this chapter was to provide background knowledge that contributes to understanding historical factors that contribute to a discussion on the sustainable development of small-scale fisher and coastal Sámi livelihood. In summarizing this chapter, it can be said that for thousands of years people in northern Norway have utilized multi-sectorial livelihoods based on accessing marine resources (Pedersen, 2012). This chapter shows how development - including colonization and modernization - has caused major disruptions to coastal communities and resulted in many small-scale fishers and coastal Sámi losing much control over their capabilities to sustainably develop their way of life. However, it also shows how through critical actions of fisher associations and the Sámi Parliament local livelihoods have received support and assistance, though concerted action that has brought some coastal communities back from the very brink of survival (Hersoug, 2005).

Within this chapter, a paradox is highlighted. The paradox is, the more northern livelihoods - livelihoods considered having been 'backwards' or non-developed - have become more like those of Norwegians in the south, the more it has become harder for local people to maintain relative control over their livelihoods. This means that there has been a price to pay, in a way, by being able to participate in modern organizations, for instance, because it has meant local authority has changed. Therefore, by northern people becoming closer to the south they have also become more dependent on quotas and other bureaucratic requirements related to legitimizing what it means to be a fisher today.

The next chapter presents a case study exploring livelihoods on the island of Spildra and challenging factors affecting the sustainable development of small-scale fishers and coastal Sámi livelihoods.

## 5 Livelihoods on Spildra: A Case Study

This chapter is presented as a case study on livelihoods on the island of Spildra. Empirical data presented in this chapter was collected during field/work on the island in 2016. This case study explores factors that characterize contemporary livelihoods of local people on the island. Initially, the chapter examines what characterizes livelihoods of people living on Spildra today and, then, factors identified by local informants as negatively affecting their livelihoods. The chapter is organized by way of topics informants brought into conversations. Analysis in this case study uses sustainability theories outlined in chapter 3, including the sustainable livelihood framework (see figure 1).



*Figure 2.* Map locating Spildra in relation to established aquaculture farms (in blue) and a proposed farm (in red) (Brattland & Eythorsson, 2016, p. 31)

### 5.1 Livelihoods on Spildra

From the outside, livelihoods on Spildra today look resilient. Locals seem to have access to a well-functioning local fisher organization and an active local community association. Furthermore, locals seem to have a strong asset base to draw livelihood strategies from; especially in the form of natural resources from the local fjord; Kvaenangen. In addition, by living in Norway, it could be assumed that locals are financially secure, have good access to

both social and health services, secure housing, reliable fresh water supplies and reliable communications.

When asked: What is your livelihood? Informants gave a range of replies; indicating most locals have multi-sectorial forms of livelihood. All informants said that their forms of livelihoods consisted of accessing resources in the sea, either through subsistence fishing, commercial fishing and/or fishing tourism. Subsequently, small-scale fishers on Spildra could be characterized as performing an artisanal<sup>35</sup> livelihood. The way of life is artisanal because fishers produce dried fish - cod preserved as klipfisk, for instance - using artisanal methods of production. Informants also indicated that their livelihoods all make use of hunting and gathering practices, hunting birds, such as grey goose and grouse, and gathering, eggs from geese and seagulls, and berries - including blueberries, cloudberries, lingonberries and crowberries - as well as different mushrooms, especially of the Cantrell and the brown hood varieties. They also all said that they were involved in some type of agricultural production; either for commercial and/or subsistence purposes. Commercially, some informants' livelihoods consisted of farming sheep, while for subsistence, crops such as potatoes, strawberries, currants, cabbages, squash, herbs and lettuces were grown on the island. Replies also indicated that agricultural material was as being harvested from by locals from the sea and used by in the form of soil amendments. Additionally, some informants also acknowledged that their livelihoods utilized local wood supplies for purposes such as heating. In addition, most informants identified that they worked in other industries outside of fishing that included, for instance, transport and tourism, education, building and bio-engineering.

The following data was generated during focus group interviews and presented here to illustrate some of the diversity of livelihoods people have and provide examples of what characterizes contemporary small-scale fisher livelihood in northern Norway.

In describing his livelihood, Roger Pedersen said:

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<sup>35</sup> Artisanal tends to imply “a simple, individual (self-employed) or family type of enterprise [...], most often operated by the owner” (FAO, in The World Bank, 2008, p.6). and, because of this, the terms small-scale fisher and artisanal are often used interchangeably (The World Bank, 2008).

*I'm a fisherman and a sheep holder [...] we take half from the sea and the other half from the land of the sheep. [...]. We use all the sea. [...] I can't travel many days; we have small children. [...] Then I must stay home to help her with all the animals of course.*

In addition, Trond and Sigrid Isaksen described their livelihoods as:

*One part is fishing, where in the winter time I prepare the fish and sell it to restaurants directly, so I can't travel far from the island because I have to prepare the fish. [...] In summer time we have tourists and we rent out cabins and small boats. Mostly for fishing tourism. In the autumn, we fish with long lines.*

Roger Olsen stated that his main source of livelihood was from small-scale fishing, said that fishing was more than just the act of catching fish, he stated:

*We've been fishing for generations [...] what people don't see is the work we have to do with maintenance and repairs.*

Additionally, in highlighting the trend towards diversification into tourism by small-scale fishers as a livelihood strategy; Roy Isaksen, in describing his and his wife's livelihoods, said:

*My wife owns the business and I do a lot of transportation for the tourists.*

Based on findings in this section it can be said that contemporary artisanal livelihoods in northern Norway can be characterized by complexity and that small-scale fisher livelihoods involve a lot of work that supports the livelihood indirectly from fishing, including important work such as doing repairs and performing maintenance. The findings also highlight that some artisanal livelihoods are dependent on informants residing permanently in one location, thus placing restrictions on what types of livelihood strategies they can choose from and, subsequently, affects the outcomes available to them. Dependencies include commitments to animal care and family responsibilities. Results also show that a major asset base for small-scale fisher livelihood is that of natural marine resources. Furthermore, they show that because of the self-sufficient nature of people's livelihoods many of the activities people choose to do are both time-consuming and dependent on environmental conditions, such as the weather; for instance, fishing, building, wood chopping, hunting and gathering. Consequently, it could be said that contemporary livelihoods of small-scale fishers in northern Norway are characterized by degrees of complexity and unpredictability. It seems to be that contemporary livelihoods on

the island are household based, in which men and women have complementary roles to place in sustaining a good and decent life for everyone.

## **5.2 Challenges to Livelihoods**

This section presents data gathered from the question: What is negatively affecting your livelihood? In doing so, it explores challenges identified by informants as negatively affecting their livelihoods. In particular, attention will be drawn to the basis of anxiety local people feel contributed to the management of resource on which their livelihoods depend.

### **5.2.1 Encountering Aquaculture**

Aquaculture – specifically fin-fish farming for salmon – was identified unanimously by informants as negatively affecting their livelihoods. Findings identify factors including; concerns over access to resources in the fjord; the impacts on the environment of fish farms - including biodiversity loss, pollution, disease and maladaptation of wild fish species; and social issues. Findings also indicate that these factors are causing anxiety within the community, especially with the industries predicted growth.

In assessing the predicted growth, Trond Isaksen said:

*The Norwegian Government say that there should be six times more fish farms over the next 20-year period.*

Because of this, informants were concerned that the resources people use in the fjord today might be increasingly compromised because of fish farms. Specifically, claims that cod entering or, more precisely, not entering the fjord would eventually result due to the trend of increased aquaculture development<sup>36</sup>. Results also show technological and organizational issues associated with aquaculture as negative factors contributing to the sustainable development of livelihoods among informants.

#### **The challenge of access**

Findings in this section reinstate the fact that small-scale fishers are different categorical users of the fjord compared to aquaculture, as such, they have different requirements to access. Fish farming is an industry that is relatively fixed to a location and has a degree of control, since

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<sup>36</sup> Claims made in other communities in northern-Norway that cod avoided areas where salmon farming was taking place (Hersoug, 2015).

raising and feeding salmon is relatively controlled using equipment and production techniques to farm fish. Small-scale fishing, however, is more dependent on externalities. For instance, fishers are dependent on weather conditions and climatic factors, such as tidal flows, what fish eat and/or whether their boats are capable of fishing due to conditions on the water. Fishers must follow the fish, while fish-farmers control the fish.

Results of this study show that access in the fjord to good fishing places and good healthy stocks of fish was a factor identified by informants as negatively affecting their livelihoods. Factors include not only physical challenges to locations where fishers can fish and are safe to fish but also to accessing good numbers of quality fish. Amongst concerns identified in relation to access to fishing spots and safe working conditions, connected to the predicted trend of aquaculture expansion, Trond Isaksen stated that the aquaculture industry:

*want to have more fish farms in the areas we're fishing, that's, of course, a big problem for us. [...] Because we lose those particular spots. And they want to put fish farms out in places where its calm and protected from wind and so on, of course, those are the best places to fish because we have a small fishing boat, and it's not so fit for bad weather conditions.[...] [W]e want to have a comfortable work. Most people want to have a comfortable working [environment], not to work on the edge all the time. So, it's better to fish in protected areas, not travel out into deep-sea.*

Because the boats small-scale fishers use they are unable to go further afield - i.e. into the Barents Sea - to fish. In addition, highlighting added concern about wild fish eating fish food excessively fed by fish farms, Roy Isaksen stated that fishers:

*get limited areas and worse types of fish. Because the fish eat the pellets. [...] [Also,] the good places to take out tourists fishing and sightseeing are getting taken over by fish farms.*

Illustrating anxiety around the potential of forced access closures to the fjord because of the possibility of widespread disease originating from fish-farms, Roger Pedersen stated:

*when they get illness in the farm they might say 'you can't go out with your boats because your area [has] illness', that's a problem we will get. Not only the fishing boats, all kinds of boats. So, we have a problem with someone coming to say you don't have the right to be in this area, or this area, I don't like that. [...] Another problem [is that] they want to have salmon out until Haukoya. [...] You see they (local government*



representatives) are talking with Marine Harvest and Leroy<sup>37</sup>. You see the local government doesn't understand what happens. [...] In Skjervoy they want to get salmon in this area. [...] The problem is the stream. It's a very heavy stream in this area. They have a farm here (points map) [...] and in the old days, in the 1990s we fished a lot in this area, this day nothing, it's like a desert. [...] And I can only fish a little here (pointing to another area). When they get the salmon here the stream will take it into [the cod spawning ground] 23 hours a day (illustrating on map the way the currents work in relation to the effect the prospective salmon farms will have on the cod spawning ground at the entrance to the fjord). [...] That's a big problem. If they come here, Harvest, this stream goes here (points map again), then you have a closed fjord.

In addition, Sigrid Isaksen raised concerns over policy issues around aquaculture, stating:

*the salmon farms have to move every 5-10 years.*

Sigrid's concern highlights anxiety around uncertainty about management in the fjord and over how aquaculture will affect small-scale fishers' access to resources in the fjord long-term. Informants were also concerned they might be forced to stop fishing commercially because of the increasing factors relating to issues over access. While relatively optimistic, Trond Isaksen said he hopes:

*the fish farms don't chase away all the fish that we're fishing, if that happens then we can't live here for the winter at all. [...] No, we cannot do our factory fabrication anymore, then we have to move away from the fjord. [...] If we have to fish somewhere else, to get the fish, then it's easier to move everything. [...] If we are not fishing from home, then we cannot live here, we have to find another place. [...] Our boat is not big enough and equipped for living, so if we go somewhere else to fish, we have to get another place to live. Maybe set up a factory in another place.*

Roger Pedersen raised similar concern, asserting:

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<sup>37</sup> Marine Harvest and Leroy are two of the largest Salmon producers in the world. Both companies have a relative monopoly on fish farming in the waters around Spildra today and are actively looking to increase development. Since 1960 the production of farmed fish in Norway - the largest producer of Atlantic salmon in the world - has increased from less than 1,000 tons to an estimated 1250,000 tons in 2015. Fish farming is seen as 'Norway's answer to IKEA' and one of the 'sustainable' alternatives to the petroleum industry as it gradually begins to decrease (Hersoug, 2015). For more information on these companies and their perspectives on sustainability see <http://marineharvest.com/planet/sustainability/> and <https://www.leroyseafood.com/en/Business/Sustainability1/>

*if they start with a salmon farm in my area then I see big trouble in my livelihood and I see that I can't fish where I used to fish. [...] [M]aybe I have to stop fishing because I must travel far away to get the fish and I can't only live from sheep.*

Aquaculture is a relatively controlled industry, while local cod and pollock (sei) fisheries are closely regulated by natural factors. Because of this, the risk calculations are different between small-scale fishers and aquaculture. Consequently, the two categorical users rely on different adaptation strategies being two very different users in the fjord. Any changes in the fjord that might see aquaculture companies having to move their business to another fjord would see them losing money, while for local fishers' potential risks involve having to give up fishing commercially altogether and/or move from the local community with the whole family. Thus, the risks involved for small-scale fishers around access is not just about 'business'.

In analyzing factors associated with access that affect the sustainable development of small-scale fisher livelihoods posed by the increasing trend of aquaculture development the following could be assumed. The vulnerability context (see figure 1) of small-scale fisher livelihood is being affected by aquaculture because of the entangled nature of the relationship between the different user groups. The transforming structures associated with aquaculture affect access small-scale fishers have to resources, and, subsequently, affecting their capabilities to pursue livelihoods strategies and achieve sustainable outcomes. Concerns about access included access that might be found in the vulnerability context to fishing locations, access to good numbers of quality fish and access to safe workplaces. It can also be assumed that the anxiety locals had about the future of their livelihood either due to the possibility of access in the future being denied or that they would have to stop fishing locally and/or relocate to continue to peruse a small-scale fisher livelihood results from projected trends of aquaculture growth and the associated continued limitation on access that would result. Consequently, concepts of freedom and liberty that contribute to a sustainable livelihood are challenged by the other user in the fjord.

### **Challenging with biodiversity loss, pollution, maladaptation and disease**

Results highlight additional negative factors associated with biodiversity loss, pollution and changes in fish that result from aquaculture<sup>38</sup> that affect small-scale fisher livelihood. While

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<sup>38</sup> Many of these factors have been known to the aquaculture industry for at least the past 20 years (Pedersen, 2012).

informants acknowledged that little scientific data was available to support several of their claims, they were worried that aquaculture is affecting the fjord now and, if the growth trend continues, will have further implications for biodiversity in the future.

### **Biodiversity loss and impacts on community**

Results show that informants had concerns related to the potential effects associated with aquaculture on biodiversity, especially on cod stocks. Based on local knowledge of cod trends, informants claimed that dramatic losses of cod in the local fjords have happened since fish farming was developed in the area and claims that in the wild cod naturally avoided salmon. In relation to local knowledge of cod, Roy Isaksen stated:

*the cod, they don't go near fish farms. The cod come into the fjord and want to spawn, they don't like the smell of the salmon - that's been tested in the laboratory [...] so that means more than 3/4 of the whole fjord [...] the cod [today] don't pass that area. So, we only have 1/4 of the fjord where the cod are coming into spawn. [...] In the 70s and 80s, before the salmon farming started up we had one of the biggest stocks of local cod. They said that inside this fjord were about 5000 tone of local cod, [...] they didn't go to neighboring fjords to spawn. And, some of that local stock is gone, completely gone, and that happened more and more as the salmon industry got bigger, so there's nothing left of it.*

Similarly, Trond Isaksen was concerned that based on evidence of what has happened to other fjords and, subsequently, other small-scale fishers and coastal Sámi in the region, species loss is correlated to the introduction and expansion of aquaculture, stating:

*We have had many good fjords up here in the north that have been very rich fishing fjords, but when the salmon farms were established the fishing was dying out. [...] Like Ullsfjord, it totally ruined the fjord. And, in Altafjord. Porsangerfjord is also the same happening. [...] Kvaenangen was actually the best fjord for sei (pollock) fishing in the summer time in the World in the 1990s. [...] Who knows maybe it was fished up, maybe the salmon farms had an impact, we don't really know. Now I see this summer, there are very many small sei, so perhaps it's growing again. [...] Maybe they are more alert to the salmon than the cod. Maybe they reacted. [...] [Because] this summer there is much less [farmed]salmon in the fjord, because they have shut down 3 places and have not got the new ones up and going yet.*

It is interesting to note the correlation between reduced fish farm activity and the increase of pollock stocks. A comment that surely holds hope that fish species can recover after dramatic losses. Trond also raised added concern, saying:

*we fish in spring time when the cod is coming in. [...] And, the Barents sea cod don't come into fjords where they can smell such an amount of salmon because the salmon,*

*of course, are a predator of their eggs. They come for breeding and then see that this is not a good area to put their eggs and they turn around and find another fjord. [...] [I]t's affecting the whole fjord [...] it's not so easy as the local government suggests, move 200m further south, no it doesn't function like that, they have to move 2km, maybe more, further south. [...] You can see, in general, the number [of cod] is decreasing when the salmon have come into the fjord.*

In providing local knowledge relating the fjord adjacent to Spildra, Jokelfjord, informants were concerned that the effects that species loss had on the livelihoods of small-scale fishers there may be the resulting fate of their own livelihoods. Informants stated that Jokelfjord suffered a collapse of local cod stocks and the collapse correlates with aquaculture being introduced in the fjord. Informants framed their understanding relative to the potential of future development of fish farms around the entrance to the greater Kvaenangenfjord, especially in the area around Haukoya, as possibly affecting their own livelihoods in similar ways. In recounting his knowledge of what happened in Jokelfjord, Trond Isaksen remembered:

*when they put fish farms out at the end of the fjord. Before it was a very good fjord to fish. My father fished that fjord. When I was younger, I fished that fjord. There was a lot of big skrei(cod) in the fjord and after the fish farms came, there was no skrei. Only the local cod that lived inside. And, the local cod died out. Maybe they were fished out, I don't know, but they died out.*

Adding to this, Sigrid Isaksen said:

*Jokelfjord is completely empty. [...] It could happen in this fjord also. It's a bigger fjord, but they put up more salmon and put it further and further out so they block the entrance. So, now they want to put it directly into the stream that flows in and out of the fjord.*

In reply, Trond specified that:

*The Barents Sea cod comes in on that side of the fjord. And, they want to put farms on the actual spots where they are breeding and very close to spots where they are breeding. [...] You can put it like this that they are putting salmon farms out in the middle of the river in the sea, where the current goes.*

In addition to factors related to the loss of cod species, concern was raised that other species were being lost, either to being eaten directly by farmed fish or due to toxins used in aquaculture to control lice. Relating to this, Roger Pedersen said that knock-on effects were affecting others types of biodiversity - of species further down the food chain - possibly correlated to declining cod numbers. Roger suggested that a more holistic understanding of the fjord and the effects that development has on marine species within it was required, saying:

*go and see the little fish, what the cod eat, and the cod babies. [...] A grown up cod has no trouble, but it's a lot of other fish. If you take one thing away then the cod have no food. I see a lot of trouble with that in the big picture. You don't go and just see the cod and the salmon, or what you want to see, you must see everything.*

In addition, relating to the effects of pollutants, Trond Isaksen said:

*they are pumping in toxin to get rid of lice. [...] [T]hey kill the lice, and they kill everything with a shell, shrimps, all the feeds, the krill. Everything is killed with this stuff, and the stuff they are using doubles in one year they are trying to fight the lice.*

These results raise several issues. In comparing knowledge of the past with the current trend of the growth of aquaculture, informants provided local knowledge on the potential of development to affect local biodiversity in new ways. Furthermore, findings in this section show that the anxiety present in the local community related to their livelihoods is connected to factors of uncertainty surrounding biodiversity loss based on local knowledge of events that have occurred in other areas in the region and correlate to the loss of small-scale fisher livelihood; namely in Ullsfjord, Altafjord, Porsangerfjord and Jokelfjord. Consequently, findings show that anxiety was present because of the potential effects for their own fjord, Kvaenangen, and the communities and livelihoods within it if current trends continue. It can be assumed that trends in biodiversity loss influence the vulnerability context of fishers to access the natural assets they require for sustainably developing their livelihoods. Thus, the loss of important natural assets, such as cod and/or the species cod feed on, impacts the livelihood strategies available to fishers and in turn affects the potential of sustainable livelihood outcomes available.

### **Pollution**

Pollution from aquaculture was another factor identified as affecting local livelihoods. In this context, pollution is predominantly due to effluent produced by farmed fish and excess fish food discharge. This section highlights concerns informants had that related to pollution.

Puzzled by what she saw as the hypocrisy of some industry and government representatives, who she claimed denied many of the negative effects of pollution on the environment, Sigrid Isaksen stated:

*you can wonder why they have to have more space around the laks (salmon) farms, because [some representatives insist] it's so eco-friendly.*

Also, Roger Pedersen understood that:

*in the sea you have a lot of miljø (environment), that's my problem, the problem that all the crap goes in the sea, that's a big problem.*

Furthermore, Jarle Olsen was anxious, claiming that to his knowledge from one large-scale fish farm:

*the same amount of shit as a town of approximately 40,000 people was produced.*

In addition, Roger Pedersen said:

*the shit can travel out a far distance and get spread over a wide area, so they spread the pollution over a wide area, instead of directly under the sea farm.*

However, he also stated:

*I don't have anything against the salmon farm, but we don't want it in the sea. If they are in the sea, they must have a lockanleg (closed containment farm). [...] And, they can take all the crap and use it on the fields.*

Furthermore, in recounting a conversation he had with a fish farmer about his concerns about pollution, Roger stated:

*They say, [...] 'you, what do you do with all your sheep shit?' Yes, sir, I take it into my fields, and I take it for grass growing, that's what I'm doing. And the government say 'if you have sheep or other animals you must get some field in to take the crap out in, but if you are in the sea, no you can take a shit', and pew, allover.*

Rodger Olsen also claimed he had caught effluent produced by a fish farm in his nets fishing outside the entrance to the fjord around Red Island that originated from a fish-farm far down in the south of the fjord off Roklan Island.

These findings show that pollution associated with aquaculture is a factor affecting small-scale fisher livelihoods as pollution affects the natural assets they rely on to sustain their livelihoods. Results here also show that people's concerns about pollution, like those in the previous section related to biodiversity loss, are widely debated; this debate is produced because of local knowledge of examples from other places in northern Norway.

## Threats from disease and maladaptation

Factors to do with disease and maladaptation to fishes associated with aquaculture were also of concern to informants. Like previous sections, based on local knowledge these factors had widespread effects on the environment. Raising concern that the intensification of aquaculture coupled with general understandings of the disease factors associated with the industry informants were alarmed by acknowledged risks evident in the precautionary approach the industry was being forced to take. Concerned, Sigrid Isaksen said:

*I know it's a precaution, but why have the precaution when it's such a friendly product? Why have the precaution when the salmon farm has to move every 5-10 years? Instead of having a lot of small spots close to each other, they put all the fish in one spot. How close are the fish then? How is it when they get sick? Then all the fish get sick?*

Informants also raised concern that new feed types being used were causing maladaptation in not only farmed fish, but also to wild fish and other environmental services. In relation to biological changes caused by feeding new types of feed, as Trond understood:

*The other thing is that they haven't managed to get all the fish food eaten up by the salmon, so some spills down under the farms, around 500kg per day, down in the sea. [...] [L]ocal cod and fish being fed under there, they get so big and fat you can't use them for human food. The quality is good, there are no toxins in them, but they are so fat you can stick your fingers into the fish, so no fish factory wants them. No fisherman wants them either. When they are slaughtering salmon, they starve them for two weeks to get rid of some of the fat before they slaughter it, but the wild fish get fed all the time. [...] And, then you have the manure. [...] [W]hen you get small areas, you get a lot of plankton, an overgrowth of plankton.*

In addition, Roy Isaksen stated that:

*fish food now its soy, so when you feed them 85% soy maybe it's not a fish swimming anymore in the fish farms, maybe it's a pig and you start thinking about it, or it's a chicken that's swimming there because it's changing the DNA in the fish. It's slowly changing because you're feeding your feeding the wrong food that it shouldn't have. That's the worst thing I've heard, that now [...] they have big problems to get enough soya. [...] [N]ow they have started a project where they are feeding the salmon with chicken.*

Findings presented here provide additional insight into factors associated with aquaculture that potentially affect the sustainable development of coastal livelihoods. As noted, while aquaculture users are forced to practice a precautionary principle, results show that local people are still left to speculate about the potential effects of the user in their local areas. Furthermore, the fact that new types of feed include, for instance, avian meal - chicken - being introduced

into the environment made people anxious. Consequently, findings highlight that because of a lack of scientific data available people are suspicious about knowledge being hidden from the local people about factors associated with aquaculture.

### **Communication issues**

Findings in this section highlight concern informants had in relation to communication factors. In responding to a question around steps informants had taken to address their concerns, the following event was conferred. The event took place between Trond and Sigrid Isaksen, and fish farm representatives. In describing the meeting that took place in their home on Spildra, the couple provided the following dialogue.

*Trond: We had, what do you call him, it was the press director, they have a man who works only for the press in Marine Harvest, and he was here and had a meeting with me and Sigrid. [...] And, the local boss of Marine Harvest Kvaenangen. And, that man, daglig leder (operational manager) in this area, he claimed he lived in Burfjord, but he actually lives in Tromsø. [...] He said he lived in Burfjord, but when he was leaving to go home to his home samboer (cohabitant) who lives in Tromsø.*

*Sigrid: It was last autumn. Because they started to call us in late summer and wanted to have a meeting with us [...] so we had a meeting [...] in October [2015]. [...] The PR chief in Marine Harvest [...] he was calling several times and we didn't know what they wanted the meeting for. So, we were a bit curious. [...] We could guess. [...] They knew we had been in the media. [...] We haven't been active in the media, but the media have been active with us.*

*Trond: The media often go after Sigrid because it's unusual to have a woman who is fishing; it looks good in the media. [...] I was thinking when they called us and say that I don't have anything to talk about, but when they call us, I should not be negative I think. I'm open to getting input, 'hey if you want to come and talk, let's talk'.*

*Sigrid: We thought that maybe if we didn't talk with them or meet them they would use that against us, and [say] that we don't want to cooperate.*

*Trond: So, we thought 'you can come, I'm not afraid of talking with you', but we could not get an agreement. Because they [...] could move it 'a little from this side, or from that side if that would help we could move our fish farm'. But, if you move it 50m to the north or the south it doesn't matter anyway, the fish come in the fjord and they smell it anyway; if its 50m here or 50m there. Anyway, we don't want fish close to it at all, you don't want fish that's living close to the fish farm. And, they were very strange when I told them it doesn't matter because I would never put my nets out 100m away from a fish farm. [...] We said 'no, get away, we don't want you here, not at all. 50m here or 50m there on that side, we don't want it at all. That's the only option we have'.*

*Sigrid: They wanted to give us a job; they said 'yeah we can give you a job' because they want to have local people who can stay on the island and [...] use the boats. [...] Yes, there's a pier on that side close to it. So, we tell them 'that's impossible to drive to*



*that side of the island in winter because its winter time and the road isn't cleared'. And, they didn't know that, so they hadn't put that much effort into what's going on the island. [...] He claimed that they were going to fix the grocery store, the port and the ferry. We wondered how he could do all that!*

The above conversation illustrates challenging factors associated with communication and consensus making. Highlighted are concerns about how communication with both aquaculture representatives and the media affecting small-scale fishers; namely claims that the media had targeted Sigrid because she is a woman fisher, something which was gradually becoming more uncommon. During other focus groups, informants also raised concerns that media published 'fake-news' portraying local fishers as instigators prone to do illegal activities to stop the fish farms, something informants denied. Because of communication issues like these, locals were skeptical of co-operating with the media in the future. The findings also highlight the structures of the private sector and the processes that informants have been entangled with when in communication with fish farm representatives, with both user groups having very different goals and aspirations in the fjord. On one side, fishers wanted to see more cautious development as cooperation, while on the other, aquaculture representatives wanted what they saw as cooperation, new farms and that local fishers should shift occupations and become fish farm workers working for them. Findings also show what might be called 'untruths' by aquaculture representatives and, consequently, informants did not trust them to fulfill commitments they were promising. In addition, informants had worries about the lack of background research the visiting representatives had in relation to the island. Subsequently, results suggest that ineffective communication processes meant the inability to reach solutions between the users and, consequently, maintain current trends affecting livelihoods on Spildra. While aquaculture representatives offer jobs that relate to the fact that local people live on Spildra, this is contrary to the fact that industry is forced to move around; i.e. the fact that there are different categorical users of the fjord and the fact that sustainability means different things to the different categorical users.

### **Strain on wider relationships**

This section explores factors that relate to wider relationships in the local area and includes the role of government in relation to aquaculture. In providing an explanation on how he had responded to the increasing trend of aquaculture, Trond Isaksen stated:

*We are responding a little late. Because we should have responded harder many years ago. Earlier it was local owners and we knew them personally. [Those] who owned the*

*fish farms around the fjord. [...] We're talking 6 or 7 years ago. They were a little bit more humble about it, but of course, they were expanding all the time. You could say that they were a little bit more interested to talk to the neighbors and to not get into big fights with the neighbors. But we should have. They have also been quite smart, they're businessmen, they sold it for half a billion NOK, and so they're not stupid. We should have stopped the growth then, also before, because they were buying the neighbors. In the fjord, there were up to 5 different companies who were doing fish farming [...] 3 or 4 in Jokelfjord, one in Braten and one in Sorstrommen.*

*But there have always been ups and downs in fish farming, especially in the early years. [...] [T]hey've been helped by the government several times, because they were lying down with a broken back and the government would help them - paid their loans, gave them money, gave them new loans and built them up again. And, especially in this fjord, the local government in this fjord they said, 'we wouldn't let every one of them survive, just say that you are the only one we want to support'. They didn't support the neighbors, so that the one they did support, Jokelfjordlaks, they could buy the neighbors quite cheap because they didn't get any help from the government to pay their loans and something like that. [...]. Its lobbyism and money, [...] you have them being taken on vacation, the Canary Islands.*

*[...] [w]e should have done something to say stop. We didn't do anything and it's expanding, especially inside the fjord. And, further out, because that's our local fishing areas but now, especially that we see they are trying to go further out, now we have to do everything to stop them.*

The finding provides knowledge that highlights personal ties that fishers had to previous fish farmers when farms were owned and operated by locals, and that assistance was provided to the industry by the government. Also present is an insight into the correlation between pressures on small-scale fisher's livelihoods and the expansion of the aquaculture industry.

Roger Pedersen raised further issues that relate to the large multi-national aquaculture companies owning and operating fish-farms in the fjord today, saying they:

*are very big and have a lot of money. And, they have people who are a lot better in English than I am. Yes, they have people who are just there to talk their business, and I shall talk with [them]. It's crazy they get lawyers for everything. So I'm a little man if you see against Harvest. But I'm a big man because of my living by myself. I don't need a lawyer yet. So when we try to speak to them, we don't speak legalese. I'm a farmer fisherman and I'm talking with a lawyer. Do you understand? The lawyer can speak and I don't understand what they're talking about. And, yes, he's very good too. Very good to talking. Very good to say something that means nothing.*

*[...] But the government or the big guys in the kommune (municipality), they say 'oh, he's speaking very nice [...] we're listening to him, he's a very big man because he's good at speaking'. And, the government see that they [the aquaculture companies] have a lot of money and they take the money and throw out, to have good people. They go*

*over to say 'if you want to come here and use the ocean you have here' and lots of people you know don't want you to come here then you take the money, you spray it around you. [...] They've built football grounds in Burfjord, new grass, and the name of the arena is Harvest, Marine Harvest. And, they brought instruments for the school. Maybe it's ok? But I smell something.*

Furthermore, informants had concerns about relationships not only in Kvaenangen but at a wider regional level being affected. Roy Isaksen, for instance, stated unease that natural resource management plans he had participated in collaborating on and developing had been overlooked. In relation, Roy stated:

*We started several years ago when they were making the local plan for the fjord, the coastal zone plan. Then I was in one of the groups that were working it out. We were two from the local fishing federation, also some people from the fish farm, and also other politicians, people like that. And, then we tried to say that it's enough, we shouldn't try to go further out. You see the government hasn't used what we had put down on paper, they just wanted to expand further out to where we had agreed on. [...] This was in 2014. [...] I have been involved since the 90s. All those, you see the fish farms over there (pointing out the window overlooking the fjord) and all the small fish farms there (pointing to the map), affecting our fishing places, we have been against them all the time. But we haven't been heard, we've just been stepped on by the government.*

Findings here show claims that locals were not taking the jobs in the fish farming industry that had promised to local people and workers in the industry were mainly foreign; brought in to do most of the manual work required in farming and processing operations.

Results in this section highlight concerns locals have with factors associated with transforming structures and processes, mainly through the connections between users and administrative institutions, their cultures and their policies, that affect their livelihoods. Money was a factor claimed as causing strain on local relationships; with informants sighting lobbying as contributing to a favoritism of aquaculture as a user, at the expense of other users of the fjord. These findings raise questions of mutual benefit sharing in the fjord and show informant apprehensions about the unfair advantage aquaculture companies hold due to their financial power and the promises they were making locally. Results also suggest that local people do not feel that their voices are being heard and that protest often does not get very far because money is buying a lot of power in the local area. Findings in this section also highlight the fact that democratic procedures in the area are not currently facilitating solutions to the problems between resource users in the fjord. In other words, decision-making processes do not seem to invite users to engage in decisions as legitimate stakeholders. Consequently, local people feel

alienated from the 'language game' used by local government; thus, suspicion and mistrust prevail.

This section - titled 'Encountering Aquaculture' - has explored factors associated with aquaculture affecting small-scale fisher livelihood. Findings in this section primarily relate to a larger picture of marine resource management. They also connect to wider debates and commitments about human ecological responsibility to sustainably manage marine environments (United Nations Food and Agriculture Organization, 2007; World Bank, 2008; United Nations, 2016). Results show that local knowledge provides critical insight on factors that contribute to building understanding related to the sustainable development of small-scale fisher's livelihoods; understanding in relation to aquaculture as a different user of the fjord as a resource.

### **5.2.2 The Changing Face of Local Services**

Results in this section identify factors affecting local livelihoods due to changes to local services. Findings show that cuts to public services, for instance, local snow removal services from public roads, transport services to the island and the closing of the island's school were factors affecting small-scale fisher's livelihoods. Additionally, pressure from the local government on the Spildra community over their waste services, it was claimed, is forcing the local community into added financial burden, as they are being forced to construct a new sewerage system on the island. Findings also show that informants were worried about being discriminated against by government representatives, in part they felt, because of their raising a voice to unsustainable aquaculture development and thought they might be bearing repercussions because of it. Results also show that informants felt belittled by government authorities due to their choice to remain as small-scale fishers. In addition, findings show local concern about the heavy dependence of the wider community on the government as an employment provider. The following statements show factors affecting local livelihoods because of the changing face of public services in the local area. Sigrid Isaksen, for instance, said:

*They cut on the public transport we had from the island. We have only one catamaran vessel that travels with passengers, that route is decreasing, they're cutting. So, it's getting more and more difficult to live and get to the mainland to get groceries and parts. [...] For us to travel to sell our fish we have to have our fish with us. It's expensive to have our fish on the boat. [...] We have to pay for cargo. [...] And, if we have to drive up, it's not possible for us to come home again. So, we have to stay away several days*

*to get home again. It makes it expensive. [...] [T]he boat went daily to Burffjord - in, in the morning, out in the afternoon - very neat. I liked that. But [...] [now] the boat only goes 3 days a week.*

While highlighting a concern with the heavy dependence many of the local population has on the government as an employer, Roy Isaksen stated that:

*now, in the fjord, we're only 1200 people and that's actually too small a society to have their own major and politicians to take care of it like they do now. Because you get a little bit too close to the peoples you have to serve, you're related to them and they're your neighbors. You mix with them all the time, so you can get a little bit too close, and actually, in this community, of all the people who work, 87% of them are working for the kommune and that's not healthy, because you need more people working to be entrepreneurs, do other types of things, to start jobs.*

Factors like these potentially affect livelihoods on Spildra economically, as critical physical assets their livelihoods are dependent on are being exposed to a greater vulnerability. As we have seen earlier in this thesis, poverty is a relative concept. However, while local people are nowhere near poverty per se, it could be argued that by being forced to pay higher costs for transportation and accommodation, due to having to stay off the island because a cut in transport forces fishers to wait on the mainland, or by being forced into paying more for waste services, it could be said that to maintain livelihoods people on Splidra are being forced into a state of less economic basis. As stated earlier, poverty is the opposite of a sustainable livelihood, and the concept of being financially disadvantaged runs counter to the first step of sustainable livelihood outcomes, if analyzed using the sustainable livelihood framework, of attaining more income, not less (UK Department for International Development, 1999).

In addition, findings show informants concerned that they were fretful of being discriminated against. Discrimination similar, it is suggested, to that issued against small-scale fishers by the economists of the fisheries department after the Second World War who saw no future in small-scale fisher livelihoods (Hersoug, 2005), instead choosing to, in this instance, favor large-scale aquaculture.

### **5.2.3 Additional Challenges**

Results also highlight additional challenges affecting fishers in the forms of supporting new fishers and some associated with the trend of increased tourist fishers. Findings show that informants were worried about how challenges such as these would affect the community in the future. The study identified that, as a profession, small-scale fishing was having huge

problems to recruit young people into the industry. This was particularly relevant in the case of one informant involved in this research project, Kurt Olav Olsen. While Kurt actively assisted in small-scale fishing operations, neither he nor his parents knew whether he would follow the family tradition and become a professional small-scale fisher. While Kurt acknowledged his desire to continue in the local tradition as a small-scale fisher; his parents were apprehensive about supporting him in this choice. During one focus group interview Roger Olsen, Kurt's father, said that while he believed it was possible and held hopes that more people would live on the island from small-scale fishing and farming, he was, however, anxious because of current trends. Consequently, Roger was worried that it might not be possible for Kurt to sustainably develop a livelihood as a small-scale fisher long-term in the current climate of development in the fjord. Factors related to uncertainties associated with having the closest delivery ports to the island closing, because the delivering of fish was critical to the livelihood were highlighted. Roger said that after the fish factory in Rein fjord closed - the main employer in that local community - they must now travel to Skjarvøy to deliver catch. Because of factors like these, it is currently a challenge for prospective fishers on the island to decide whether or not they should become small-scale fishers.

Additionally, results show that tourist fishing was sighted as a concern. Tourism, while being advantageous for some small-scale fishers in the local community economically, the development made some anxious, because of the impacts it had on local fish stocks. Particularly worried about the effects tourism was having on local subsistence practices, Roger Olsen said:

*I am not jealous of the income local people were making from tourists. I am upset about - not that I am jealous of the wins that tourism has brought to the island - the impact tourist fishing is having. I have trouble with the fact that the fishing grounds my grandfathers and my uncles fished almost daily caught a lot more fish locally than is possible today.*

Based on Rogers's claims, tourist fishers are another categorical user of the fjord that is affecting the livelihoods of some local people.

#### **5.2.4 Climate Change**

Findings in the study also show that climate change is affecting the sustainable development of local livelihoods. Results show climate change is affecting artisanal fisher livelihood today, with increasing temperatures affecting their ability to dry fish. Because as the climate changes and warms the fish drying season was being affected and the season reduced; due to fish drying

requiring cold conditions when, for instance, flies cannot spoil the fish during drying processes. While findings showed that climate change was affecting fishers now, in the future it could be assumed that warming seas will affect local livelihoods. For instance, research shows changes to the migration of fish species in the North Atlantic (Damicki, 2009; Pettersen, 2011) could be predicted to affect fisher capabilities to create livelihood strategies based on them in the future.

### **5.3 Chapter Summary**

This objective of this chapter was to explore factors that characterize contemporary livelihood of small-scale fishers and coastal Sámi in northern Norway. In doing so, a case study has been presented that explores contemporary artisanal livelihoods on the island of Spildra and factors claimed as negatively affecting local livelihoods. Findings shows that livelihoods of contemporary small-scale fishers continue to follow the historical trend of small-scale fisher and coastal Sámi livelihoods in northern Norway; being multi-sectorial in adaptation and continuing to show strong elements of self-sufficiency and self-reliance. Furthermore, results show that livelihood strategies, being largely nature-based, display elements of being relatively time-consuming and unpredictable.

Findings indicate challenging factors associated with the increasing trend of aquaculture as a different categorical user of the fjord; a trend that could be seen as an epitome<sup>39</sup> of challenging factors contributing to the sustainable development of small-scale fisher and coastal livelihood in northern Norway. Factors associated with aquaculture identified in this case study include access to resources, concerns with pollution and biodiversity; which all impact natural resources utilized by small-scale fishers. Additional factors identified show communication issues between actors in the fjord as well as continued changes to local services provided to local people on the island. Furthermore, challenging factors facing small-scale fishers include those associated with facilitating new fishers into the industry, tourist fishing as a user of the fjord and factors associated with climate change; such as changes to fish drying seasons for artisans.

Findings in this chapter also indicate that livelihoods of small-scale fishers and Sámi in northern Norway are entangled with many factors that contribute to their sustainable development. Indications show that many of these factors are due to transforming structures and process - i.e.

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<sup>39</sup> Epitome, defined as 'a perfect example' (Oxford University Press, 2017).

the private sector and policies that include natural resource management - contribute to the vulnerability context affecting the natural asset base small-scale fisher livelihoods rely on (see figure 1). In turn, these influence the capabilities local people have to access the resources they deem necessary to maintain strategies that produce sustainable livelihood outcomes for themselves. Therefore, it is asserted that, based on the findings presented in this case study, transforming structures and processes are contributing factors severely limiting the sustainable development of small-scale fishers and coastal Sámi in northern Norway; consequently, adding factors of uncertainty and unpredictability on people's livelihood strategies that are already characterized traditionally by factors of uncertainty and unpredictability.

As Sen (2013) insists, key concepts of sustainability are those of intergenerational justice, liberty and freedom and through such a view of sustainability it could be proposed that these concepts in combination are being challenged today in relation to small-scale fisher and Sámi livelihood; including the capability of local people to define and pursue their own goals, commitments and objectives. Consequently, it is suggested that actions which seek to contribute to the sustainable development of small-scale fisher and Sámi livelihoods in northern Norway should entail strong elements of sustainability. Moreover, suggestions must not be limited solely to the ability for people to meet their perceived material needs but must entail non-material needs of individuals and communities.

To conclude, this chapter has shown that the livelihoods of small-scale fishers and coastal Sámi in northern Norway are entangled with a multitude of factors, and because of this it is becoming increasingly difficult for local people to strategize in their livelihoods and control outcomes due to increasing uncertainties and unpredictability brought on primarily by other resource users. Moreover, results in this chapter show that, based on this case study, aspects of sustainable livelihood security - that of secure ownership and processes necessary for the sustainable development of their livelihoods - do not appear to be present. Furthermore, findings show that anxiety is present as changes are happening more rapidly and because of this people are uncertain if the ways of life they live today as small-scale fishers will be available for those of future generations. Still, as shown in this chapter, in this sparsely populated region of Arctic Norway livelihoods continue to display strong characteristics of sustainability - those of self-sufficiency and self-reliance - are dynamic, and that coastal Sámi are proud to continue to continue their indigenous ways of life



The next chapter explores goals and aspiration informants on Spildra had for the future of their livelihoods and, subsequently, prescribes suggestions that can potentially promote opportunities that can contribute to the sustainable development of small-scale fisher and coastal Sámi livelihoods in northern Norway.

## 6 Prospects and Opportunities for Local Communities

Because numbers of small-scale fishers in northern Norway have been drastically reduced, communities in which people continue to practice the livelihood are unique. They are unique because - despite social, economic and environmental disruptions - traditional and indigenous coastal Sámi ways of life and culture have been maintained. In coastal communities, like that of Spildra, people have remained committed to the culture of their ways of life and their responsibilities to maintain them. They are also special because locals are committed to continuing to do so - now and in the future. Local resilience shown by these coastal communities is like that shown in many other indigenous communities around the world; they hold a wealth of local knowledge that serves them well today - as it has done for centuries - to participate in self-determining how they choose to live (Hersoug, 2005; Birkes, 2007; Capistrano, 2010). They are also similar in that have strong claims for rights that protect them to continue to do so (International Labour Organization, 2016; Pedersen, 2012; United Nations, 2016).

Based on findings in the previous chapter, small-scale fishers and coastal Sámi want current controversies related to their livelihoods settled. Findings also show that they want the environment sustainably managed and their freedoms respected. They also show that they are proud to live as small-scale fishers; a culture and way of life that is dependent on the effective long-term management of coastal resources (Pedersen, 2012). However, results also show that since colonization small-scale fishers and coastal Sámi in northern Norway have become increasingly entangled within many different types of systems and that regulate their livelihood opportunities, for example, controlling factors that affect them including; limited access to decision-making processes; those surrounding accesses to resources; communication issues concerning other resource users of the fjord; factors to do with environmental degradation; their capabilities to participate in sustainably developing their way and culture for future generations; and climate change. Moreover, findings also show that development trends - specifically those of aquaculture - continue to cause massive disruption to local ways of life. Furthermore, that constantly local people must calculate balances and imbalances in relation to this fact; finding it hard to anticipate the resulting consequences that factor into them accessing resources.

This chapter explores opportunities that have the potential to provide support for local communities to gain greater control of ensuring that their ways of life are sustainably developed for future generations, for local and indigenous knowledge to be acknowledged in institutions and in processes that affect indigenous ways of life. In doing so, this chapter aims to show how collaborative natural resource management and indigenous rights-based approaches have the potential to provide opportunities that help to achieve sustainable development goals.

The United Nations insists that because the sustainable development of small-scale fisheries is a goal, small-scale fishers themselves need to be active participants in determining how this goal will be achieved (United Nations, 2008; United Nations Food and Agriculture Organization, 2007; International Labour Organization, 2016). Considering this, in this chapter two main questions will be explored. (1) How do informants see the future of their livelihood? And, (2) What can be suggested to potentially help in providing opportunities for the sustainable development of small-scale fisher livelihood in northern Norway?

This chapter is organized into three main parts. Initially, the chapter explores goals and aspirations informants hold about the future of their livelihoods. Then, it prescriptively suggests that community-based collaborative resource management (co-management) and indigenous rights-based approaches are pathways that may provide opportunities that can contribute towards achieving the sustainable development goals. In doing so, suggestions locate local, national and international examples that contribute to this discussion. Lastly, knowledge is presented of experiences people on Spildra have had with gaining assistance from outside supporters; by way of support gained from both the Norwegian Sámi Parliament and lawyers. Consequently, it is argued that utilizing support from both actors is essential if the sustainable development of small-scale fishers and coastal Sámi livelihoods in northern Norway is to become a reality.

## **6.1 Future Visions for Livelihood**

This section explores some of the goals and aspirations informants had about the future of their livelihoods. It could be assumed that currently the community on Spildra have access to an environment on land and in the sea, which provides them with food and income, and supports their cultural well-being. Unsurprisingly then, while goals and aspirations varied amongst informants, when asked how they see the future of their livelihoods, they all wanted to see the sustainable development of small-scale fisher livelihood on the island. Furthermore, they all

aspired towards a cleaner environment of the fjord and local capabilities continuing to be self-sufficient and self-reliant in terms of accessing natural marine resources.

Roy Isaksen provided an in-depth understanding on what he envisioned for the future of livelihoods in the region, stating:

*Perhaps we would have the fjord as we could have it for generations, that [people] could actually live on the island and be harvesting all the wealth that you can harvest, both from the sea and the land also. And, that also give meaning for young people, who are now studying and can maybe see that now they can be living on the island. Now these days you can see you are studying, you are from New Zealand, [...] you can be maybe living on the island and working on the island, but for a company that's in Singapore, for instance. So, I think that's my utopia thinking. You see people think that this is a good place to live, because of all the benefits you have on the island, but maybe will not be fishermen or farmers, but they're doing other things, that they're having homes, places on the island. Of course, I hope that someone will continue in the fishing, as fishermen, since that's been the local tradition for so many years, and of course the farming.*

*I think one of the best things that we can expand and see in the future, that's actually both in the tourist industry [and] also in taking care of local food. For instance, you can, if you have a clean fjord and I guess in the future also, you can, when you have salmon farms disappear in the fjords, have more opportunities for saying that you are selling fish from a clean fjord. You cannot do that now. So, you can have more and actually earn more per kilogram of fish that you're selling. If you also take the nature, you can also take care of the berries and more of other things like that and you can do more of that, and earn more money off that. But I don't want big industry in the fjord. I don't think we need big industry in the fjord. Instead of having one industry in the fjord that has 100 employees, I want to have 50 who have 2 employees. Because if the one broke its' back then you have 100 people without jobs. But, if you have 50 with only 2, and five of them go down then only 10 people have lost their jobs, [and] we still have 90.*

*But also, you don't need to use that much of the environment around you, use what you need. I think it's better for the climate and for the environment. Because if I start harvesting berries, for instance, I don't want to buy big machines and cut everything down in the first year, because maybe next year it won't grow anything. You have to take care to know that would sustain it for years, and years, and years. And, the same with the fish. And, the same with everything else. But you have to have people who understand that, who have that knowledge, that we have to do it, not only earn money. But also, give something back for the next generation. So, that the land we are using is better when we leave it than when we took it over, so that you're doing something good all the time. Not in a big way - that you're doing farming and you have 1000 cows, putting a lot of things in the soil, that are not good for the soil - but that you are *okologiske* (organic).*

In envisioning alternative ways of life and opportunities of livelihood in the local community, Trond and Sigrid Isaksen said:

*Of course, we hope we can live off it and don't have travel away to make money. ... [Farming] has been an option. ... If someone moves to the island that's willing to cover us for some week that may be a possibility. ... Or maybe someone who has another type of income, perhaps works on the internet or is writing a book. ... Maybe we haven't been looking widely enough to see some options. We have to think a little outside the box, we have been thinking a little too inside the box.*

These findings highlight the interconnectedness of people in the fjord, on local, national and on the global scale and the interdependencies people have on these various systems of scale; politically, economically, environmentally and socially. In addition, they highlight challenges around the dependence on and challenges associated with large-scale industries in the fjord, including the tensions between providing job opportunities and wanting to keep the fjord clean, with local communities remaining. The knowledge presented also acknowledges local awareness of livelihoods being in relation to the modern global world.

Based on findings in this section, local people want people to keep living on Spildra; to live there but maybe earn money from different occupations, perhaps in ways that see new modern multi-sectorial livelihoods emerging; new ways of life for Sámi and non-Sámi alike.

The following sections suggest ways that may provide opportunities for not only capacity building but also long-term action, continuity, motion, co-creation and collaboration the involves the community members as active participants in having more control in sustainably developing their ways of life and culture. In doing so, community-based natural resource management and indigenous-rights based pathways are suggested; highlighting the applied profile of this thesis. Moreover, suggestions are made based with the intention of overcoming factors people on Spildra have that relate to other categorical users of Kvaenangen fjord, they may also help other provide understanding for other communities engaged in similar issues.

## **6.2 Community-Based Natural Resource Management**

It is widely understood today that top-down government approaches to natural resource management - command and control type processes - do not work particularly well and are often riddled with conflict; conflict that often arises because local modes of management, local knowledge and customary practices are not incorporated into to natural resource management models (Agrawal, 1995; Jentoft, 2003; Nadasdy, 2005). Therefore, in this section, it is

suggested that community-based natural resource management approaches to natural resource management could be a solution to achieve sustainable outcomes for coastal livelihoods in northern Norway. But what does this suggestion mean in practice?

### **6.2.1 What is Co-management?**

Community-based natural resource management is commonly referred to as ‘collaborative-management’ or ‘co-management’ and is a participatory approach to natural resource management used successfully in different forms around the world (Birkes, 2007; United Nations Food and Agriculture Organization, 2007). While meaning different things to different people, a general model of co-management can be defined as “a collaborative and participatory process of regulatory decision making between representatives of user groups, government agencies, research institutions, and other stakeholders” (Jentoft, 2003, p. 3). In addition, a co-management model could include “a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources” (Borrini-Feyerabend, Farvar, Nguinguiri, & Ndangang, 2000, p. 1). Furthermore, co-management models are often reflective of the national, local, ecological and cultural contexts within which they operate. However, while principles vary between projects, key attributes within models are typically concepts of power-sharing and partnership (Agrawal, 1995; Birkes, 2007; Nadasdy, 2005). Jentoft (2003) states that additional attributes which define co-management models today are those of “democracy, transparency, accountability, and sustainability” (p.3). Co-management is historically rooted in and shaped by theoretical underpinnings of:

- Social justice and equity
- Sustainable use of natural resource
- Community-based and community-run initiatives (Borrini-Feyerabend et al., 2000, p. 4)

While models today tend to be a mix of the old and the new, fundamentally they require that all individuals and groups with legitimated concerns and interest in an area, or regarding a resource or a set of resources, understand that collaboration needs to be in the best interests of everyone involved. Importantly, just because a natural resource management project might be based on principles of participation it might not necessarily be co-management; the ‘co’ in co-management stands for collaborative rather than consultative management. Why is this

important? As Jentoft states, “[i]n the consultation mode of management, government agencies ask user-groups for advice before management decisions are made, but they have no obligation to follow the advice they get” (2003, p.4). Consequently, if co-management models are to truly succeed they must be more than merely symbolic gestures of good will and more than just arrangements by the government that aim to relieve tensions between resource users (Jentoft, 2003). Additionally, it is suggested that if co-management is to be considered as a serious institutional innovation - as a possible advisory body or consultative - then all categorical users must be empowered to genuinely participate flexibly developing and implementing management objectives. This means that everyone participating in co-management processes must be positioned on relatively equal terms and roles and obligations clearly defined (Hara and Jentoft, in Jentoft, 2003).

### **6.2.2 Fisheries-based Co-management and Mea**

Co-management in fisheries is promoted as a sustainable opportunity for overcoming challenges coastal communities face (Jentoft, 2003). Around the world, conflicts are successfully managed, indigenous ways of life revitalized and formally marginalized users genuinely participating, once again, in the management of marine resources because of co-management projects (United Nations Food and Agriculture Organization, 2007; World Bank, 2008). Regarding power sharing within any potential fisheries co-management model, as Pinkerton (in Jentoft, 2003) states, genuine collaboration can only exist in situations where fishers have the right to participate in setting management decisions. For instance, on how much, when and where fishing would occur. However, in regards to a potential co-management experiment in northern Norway, I suggest it would need to collaborate with not only small-scale fishers and coastal Sámi but also with other marine resource users such as tourism operators, recreational fishers and the aquaculture industry as well as government authorities for instance. I also suggested that any potential experiment would need to be wider in scope than just focusing on fisheries as a resource for two reasons. Because, (1) as results in this thesis shows, the problems facing the sustainable development of small-scale fishers are not necessarily about catching enough fish, per se. Factors seem to relate to wider issues that affect marine resource user placement, for instance. This suggestion is made also because (2) government authorities have not been willing, as far as I know, to genuinely consider power-sharing as an option associated with fisheries management, an aspect previous co-management bids have failed against (Hersoug, 2005).

While co-management as a concept is quite young in modern fisheries management institutions, in practice it has been used ‘informally’ within communities around the world for centuries. In northern Norway, for instance, the Mea could be potentially seen as an indigenous northern Norwegian example of this (Bjorklund, 1991). While no doubt there has been a divergence between local bureaucracies and those which apply nationally, this does not mean that local people in northern Norway have stopped practicing Mea. Still, how could inspiration gained from Mea that may help in effective local resource management? Is it possible that new models of co-management could incorporate concepts derived from Mea? Moreover, could it be possible to both revitalize the coastal Sámi practice while aiming to achieve sustainable development goals for all resource users of a fjord?

As outlined in chapter 4, Mea was an informal community-based resource management practice based on ‘small boats’ and family structures. Therefore, its system of managing distribution would not correspond well with modern economic policies associated with marine resource management. Therefore, it is suggested is that if Mea was to be incorporated into any new co-management model that this should be addressed in sensitive and inclusive ways. Importantly, it is suggested that Mea could be used as an argument that supports local people with agency and power to have claims heard. Thus, Mea claimed as an institution could help enable communities to collaborate in new modes of sustainable marine resource governance experiments. Additionally, it is suggested that any new co-management experiments be approached delicately and include scientific and non-scientific perspectives that seek long-term commitments from all stakeholders involved is important for the success of co-management projects; projects that could include the indigenous institution of Mea (Birkes, 2007).

### **6.2.3 Pushes for Co-management**

Representatives of the Sámi Parliament of Norway have been pushing for experiments of marine-based co-management since at least 1998. Co-management suggestions have not been pushed through Sámi-based rights but rather through community-based rights. However, requests have been met with caution by government authorities, who have stated concern that proposed experiments were too geographically broad and/or too vague in description. Additionally, suggestions to have a greater decentralized influence on regulating fisheries is an issue the government has stated it is not willing to move on. Still, the government has responded positively and been open to suggestions around the potential of co-management experiments in marine areas of northern Norway (Nilsen, 2005).



While there are no ‘blue-prints’ for successful co-management, it is suggested that any new projects be ‘experimental’ in nature and, to reiterate, not be explicitly focused on fisheries. Furthermore, as research shows, in a Norwegian context, a potential co-management experiment could be founded on ideas based on concepts of property rights belonging to ‘nobody’ (Jentoft, 2003). This means that rather than an individual group holding ownership the ‘local user community’ in commons would retain the authority to make decisions as a collective; instead of decision-making rights belonging solely to any one individual actor - i.e. the government or Sámi - a multi-stakeholder perspective would potentially define outcomes best for everyone involved.

Importantly, in the case of potential co-management projects associated with marine resources in northern Norway is the fact that the Sámi Parliament has a legitimate place in government<sup>40</sup>. Because of this, it is suggested that they would need to become more engaged in an area due to an experiment in co-management being developed.

#### **6.2.4 Co-management as Conflict Resolution**

It is suggested that one possible way to get a co-management experiment implemented is to use a model that frames co-management, initially, as a tool for conflict resolution. Clearly, as results in this thesis have shown, if small-scale fishers and coastal Sámi - not to mention the United Nations and the Nation-State of Norway - are to reach sustainable development goals then conflicts involving marine resource users need to be resolved in the best interests of all users. It could also be assumed, that based on the willingness of users in the case of Spildra to enter discussion, that they want the conflict resolved in sustainable ways. Consequently, is assumed that co-management as conflict resolution may be a way to reach sustainable development goals.

As a concept within some co-management models, conflict resolution generally supports processes of building trust and non-violent discussion among user-groups. Ideally, a co-management institution would take care of conflict before hostility is generated and help users

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<sup>40</sup> In the Norwegian nation-state, the Sámi Parliament are legitimate partners in government. However, they are only legitimate partners in government in regards to factors that contribute to the sustainable development of people’s lives if local people address them of their concerns or if the parliament acts on its own behalf and then, still, they must consider if they can make a difference (J. Ramstad, personal communication, April 5, 2017).

explore the range of options available for agreement. Crucial to processes of co-management as conflict resolution, however, is that the underlying causes of conflicts are identified and addressed within the co-management institution, and that genuine effort is undertaken by users to prevent conflicts from happening in the future.

It could be suggested that if a co-management experiment was to happen based on conflicts involving the management of marine resource in northern Norway then a potential mandate of a new co-management body might be to (1) provide a non-violent environment for conversation and negotiation where different user-groups can come together and build trust. And, (2) provide data to user-groups on points of conflict and (3) different options for action. Then, data generated by user-groups concerned would be (4) discussed within and (5) amongst groups. This could potentially lead to (6) written agreement being reached on perhaps one of these issues and then (7) the agreement being legitimized in writing. Followed by (8) the agreement being implemented and (9) action taken.

It is also suggested that in the case where conflict serious and user-groups might be potentially hostile or distant, facilitators, arbiters or mediators would need to be present in any meetings. They might be, for instance, retired judges, religious leaders or other local people who might be attended to the issues related or potentially might be professional conflict mediators or process facilitators. Importantly, incorporating these 'non-users' into a co-management projects greatly improves the likelihood of overcoming difficult situations (Borrini-Feyerabend et al., 2000). Another suggestion is that any new co-management experiment would need to address concepts of power. Understanding power as a concept in co-management is important because there are often huge differences in power between user-groups and, consequently, potential user-group perceptions towards a project may depend on power relational to other users involved. For instance, problems might occur if a user-group feels powerless in relation to another and/or bureaucratic processes, which might result in them resorting to illegal activities instead of collaborating (Borrini-Feyerabend et al., 2000).

While co-management does not provide guarantees for success, there is increasing awareness that if sustainable development as a goal is to be achieved then local participation is essential and that natural resources are best regulated in collaborative partnership with local communities (United Nations Food and Agriculture Organization, 2007). Because sustainable development rests on the collaborative partnership of those communities who sustain their livelihoods on any

given resources; economically, socially, politically and environmentally (Kalland, 2003). Currently, in northern Norway it is national, county and municipality governmental administrators who decide, for instance, what users can access marine resources and how many of them there can be. Consequently, small-scale fishers and coastal Sámi have little say in matters that control decisions that impact large-scale sustainable development. It is suggested that, because the government cannot solve the challenges identified in this thesis alone, co-management of natural marine resources is a dynamic tool that might. In doing so, however, discussions on rights, including the right to Mea, for instance, cannot be ignored.

In summary, in this section, it is suggested that a co-management institution may provide opportunity to provide an organizational front that provides local communities with the opportunity to have their voice legitimated when using established arguments. Therefore, it is suggested that co-management may have prospects of a different kind, not just in decision making, but of providing local communities with greater control of their livelihoods.

### **6.3 Addressing Questions of Rights and Autonomy**

*You can say traditional rights, your blood, like you're an Indian, or you're Sámi. You are this and you are that. You're what? That's because I'm a black man and I must fish there? That's not right, it's not my blood, it's not where I live that I must fish there. [...] That I can fish the wild fish, not from what kind of people I'm from, do you understand? [...]. We have the tradition of fishing in the near area you know; going out in the morning, and going back in the evening. [...] [T]hat's the tradition I think I have a right to.*

Small-scale fishers and coastal Sámi in Norway have strong claims to sustainably develop their livelihoods. As an indigenous people, coastal Sámi have strong protections available to them if they choose to exercise their rights to them. In fact, the Norwegian nation-state is responsibly committed to protect their culture and safeguard their ways of life (Stortinget, 2015; United Nations, 2016). As stated in the quote above, by Roger Pedersen of the Spildra community, claims by informants have in this thesis are based on their right to practice and maintain a traditional way of life, the right to be a small-scale fisher, to be an artisanal 'hjemmefisker' ('home-based fisher'), and the right to maintain coastal Sámi culture for the benefit of all living in their community. They also make claims to have the marine resources they depend on sustainably managed. Protections claimed to avoid this loss as coastal Sámi culture and coastal

environments of which both are protected by law; domestically under, for instance, the Norwegian Constitution (Stortinget, 2016), while International law includes a vast range of laws such as the United Nations Covenant on Civil and Political Rights (UNCCPR) (United Nations, 1976) and the International Labor Organization Convention No. 169 on Indigenous and Tribal Peoples in Independent Countries (ILO 169) (International Labour Organization, 2016).

### **6.3.1 The Norwegian Constitution**

Adopted in 1814, the Norwegian Constitution is founded on three key principles; (1) the separation of power enabling the Storting (the Norwegian Parliament) to manage through supervisory, legislative and budgetary powers; (2) executive power vesting in the King or Queen and; (3) legal power given to the court systems to uphold sovereignty of the people and human rights (Stortinget, 2015).

#### **Human Rights and the Norwegian Constitution.**

Since its inception, the Norwegian Constitution recognizes the fundamental importance of human rights. Among its freedoms, it guarantees provisions of the status of the Sámi and the sustainable development of natural resources. Sámi freedoms can be seen in Article 108 of the constitution. While, Article 112 of the constitution provides guarantees for sustainable environmental and natural resource management (Stortinget, 2016). Through the constitution, the nation-state has a responsibility to ensure and respect international human rights and the constitution provides guarantees that important international human rights treaties - including the International Covenants on Economic/Social/Cultural and Civil/Political Rights - are incorporated into the domestic legal system (Stortinget, 2015). In addition, per the United Nations (2016)

The Norwegian Constitution contains rules on state governance, and is essential in ensuring the rule of law. In 2014, the Constitution's catalogue of rights was expanded, and previously unwritten principles were codified. The principles of legality and equality before the law, as well as the right to access to an independent court are now explicitly protected under the Constitution. (p.25)

The Norwegian Constitution is the second oldest active constitution in the world (Stortinget, 2015). Articles 108 and 122 of the Constitution and how they relate to the topic of this thesis are outlined as follows.

#### **Article 108**

In guaranteeing protection for Sámi Article 108 of the Norwegian Constitution states,

The authorities of the state shall create conditions enabling the Sámi people to preserve and develop its language, culture and way of life. (Stortinget, 2016, p. 26)

It could be claimed that while not exclusively belonging to Sámi, small-scale fishing is an indigenous coastal Sámi livelihood. It is a way of life inherent to the Sámi culture and, therefore, based off the constitution, as seen here, the Norwegian government is constitutionally responsible for sustaining small-scale fisher livelihood of coastal Sámi. Conversely, would be considered unconstitutional in Norway for coastal Sámi livelihoods to be eliminated because of resource management policy. Additionally, per Article 108, the government must, in fact, be active in creating conditions suitable to enable coastal Sámi with control to develop and preserve their culture and their ways of life; which includes being small-scale fishers (Pedersen, 2012; Nilsen, 2005; Bjorklund, 1991; Brattland, 2012; Broderstad, 2003; Hersoug, 2005)

### **Article 112**

In guaranteeing the sustainable development of natural resources Article 112 of the Constitution states

Every person has the right to an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained. Natural resources shall be managed on the basis of comprehensive long-term considerations which will safeguard this right for future generations as well. In order to safeguard their right in accordance with the foregoing paragraph, citizens are entitled to information on the state of the natural environment and on the effects of any encroachment on nature that is planned or carried out. The authorities of the state shall take measures for the implementation of these principles. (Stortinget, 2016, pp. 26-27).

Based on Article 112 in Norway the right exists to have the environment managed sustainably. Moreover, based on the constitution it can be interpreted that if local people want to be made aware of the environment effects other users have currently have and/or will have on natural resources - future impacts on assets of the fjord, like shrimp or seagrass as providing critical ecological services i.e. as cod food or baby fish habitats - the government is obliged for making sure this knowledge is shared transparently with stakeholders and resource users.

As seen in this section, the Norwegian Constitution guarantees protection for coastal Sámi livelihood and the sustainable management of natural resources. Consequently, as results in this thesis suggest these constitutional rights as they relate to small-scale fishers and coastal Sámi

are currently being violated and the commitments to sustainably developing ways of life and natural resources in northern Norway are being challenged.

### **6.3.2 International Human Rights Treaties**

International laws also provide protections for the sustainable development of coastal Sámi livelihood and marine resources. In the following sections, two international treaties that provide protection - the UNCCPR and the ILO 169 - are briefly described and discussed. Furthermore, this section explores the concept of positive discrimination based on international law as it relates to livelihoods in northern Norway

#### **The United Nations Covenant on Civil and Political Rights: Article 27**

Norway is committed to the United Nations Covenant on Civil and Political Rights (United Nations, 1976), an international human rights treaty that entered force internationally in 1976. The binding agreement assures that all people, in accordance with the UN Declaration of Human Rights, should enjoy “civil and political freedom and freedom from fear and want can only be achieved if conditions are created whereby everyone may enjoy his civil and political rights, as well as his economic, social and cultural rights” (United Nations, 1976, pmb1). Smith suggests that most relevant to Sámi, and inadvertently of important relevance to others in communities where Sámi live, is Article 27 of the convention which states,

In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language. (United Nations, 1976, para. 27)

As a clearly a defined minority population, Sámi culture is guaranteed protected under the law based on this article. Importantly, as Smith stresses (in Davis & Jentoft, 2005<sup>41</sup>) that the material resource base vital for Sámi livelihoods must be included in concepts of culture. Thus, insists

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<sup>41</sup> This reference by Davis & Jentoft (2005) is sighted due to the article being published in English, whereas Smith’s original document is published in Norwegian; in a 1990 report issued by the ministry of fisheries at the request of the Sámi Parliament to clarify coastal Sámi fishing rights. It should be highlighted that the recommendations of Carsten Smith in his 1990 report on the rights of Sámi in Norway contributes considerably to the debate on small-scale fisher and coastal Sámi livelihood in northern Norway.

protection must be given to Sámi ways of life; which as this thesis shows clearly includes coastal Sámi small-scale fisher livelihood.

**The United Nations International Labour Organization Convention No. 169  
Concerning Indigenous and Tribal Peoples in Independent Countries**

ILO 169<sup>42</sup> is the only legally binding international convention that guarantees that nation-state authorities must provide conditions for the protection and enhancement of indigenous coastal Sámi livelihoods, the environments and resources on which they depend (International Labour Organization, 1989). Paragraphs 1 and 2 of Article 2 of the convention, for instance, state that

Governments shall have the responsibility for developing, with the participation of the peoples concerned, coordinated and systematic action to protect the rights of these peoples.

Such action shall include measures for: (a) ensuring that members of these peoples benefit on an equal footing from the rights and opportunities which national laws and regulations grant to other members of the population; (b) promoting the full realization of the social, economic and cultural rights of these peoples with respect for their social and cultural identity, their customs and traditions and their institutions; (c) assisting the members of the peoples concerned to eliminate socioeconomic gaps that may exist between indigenous and other members of the national community, in a manner compatible with their aspirations and ways of life. (p. 6)

In addition, Article 7, paragraph 4 states,

Governments shall take measures, in cooperation with the peoples concerned, to protect and preserve the environment of the territories they inhabit. (p. 4)

Furthermore, Article 4 of the convention guarantees,

Special measures shall be adopted as appropriate for safeguarding the persons, institutions, property, labor, cultures and environment of the peoples concerned. (International Labour Organization, 2016, p. 7)

Norway was heavily involved in the development of ILO 169 and was subsequently one of the first countries to adopt and ratify it. However, since ratification, in 1990, state authorities have been slow to implement action, especially in matters that pertain to marine resources (Davis & Jentoft, 2005). Still, the convention has heavily contributed to the nation-state aiding in the

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<sup>42</sup> For a Norwegian translation of ILO 169 see. <https://www.regjeringen.no/no/tema/urfolk-og-minoriteter/samepolitikk/midtpalte/ilokonvensjon-nr-169-om-urbefolkninger-o/id451312/>

Sámi revitalization and, it could be assumed, is evident in the amendment that created Article 108 of the Norwegian Constitution. Importantly, it is needed to understand that while in principle local and indigenous rights may seem contradictory this need not be the case.

### **6.3.3 Recommendations of Positive Discrimination**

Smith states, based on international law positive discrimination should be provided by authorities of the Norwegian nation-state to for Sámi protection; including the protection for Sámi practicing indigenous small-scale fisher livelihoods. Importantly, in a Norwegian context, however, as Smith insists - as does Roger Pedersen in the opening quote of this section - that rather than being ethnicity-based positive discrimination should be community-based. Smith claims that by locating rights-based at community levels include all residents for the critical nature of Sámi culture to be safe guarded (in Davis & Jentoft, 2005). In relation to the concept of positive discrimination and small-scale fishers, it could be suggested that, based on Smith's suggestion, that by way of ensuring the sustainable development of costal Sámi livelihoods, all livelihoods within communities where Sámi fishers live could also be protected. Thus, positive discrimination would be beneficial for all local people. Consequently, all residents within an area, regardless of ethnicity, based on indigenous rights - such as the Norwegian Constitution, ILO 169 and the UNCCPR - have the potential to benefit in participatory power-sharing long-term.

Legal protections, such as those seen above can be analyzed as providing potential opportunities to influence transforming institutions and processes that contribute and affect small-scale fisher and coastal livelihoods. Because international laws are global systems (Freidman, 1996), it is suggested that local people should be attuned to the opportunities they provide and base claims in relation to them; perhaps in the same way locals are attuned to, say tourism or transport, other global systems on which they both benefit from. However, for claims and rights such as these to be enforced, people need to engage in ways that force acknowledgement of laws, often in court. In the case of this thesis, it is suggested that the local fishers' associations or the local community association may be the ones to do this for instance.

Based on the above understanding, this means that Norway, as a nation-state, is committed internationally in relation to the Sámi indigenous minority. Because of this, there is opportunity that the work of the government can be tried in court if actors - both domestically and internationally - contest that the Norwegian state is breaching these treaties. This is important,



because Sámi, unlike other minorities in the Norwegian state, are an indigenous minority. Subsequently, it is suggested that the community of Spildra, like that of Manndalen in the Svartskogen case (Bjerkli, 2005), could use an argument that includes claims to rights as indigenous people in cases that relate to gaining greater control in natural resource management. However, to take action to gain more control requires assistance.

The following section outlines experiences informants have had with gaining assistance from outside actors and suggests how ‘outsiders’ could potentially help with such action.

### **6.3.4 The Role of the Sámi Parliament and Other Supporters**

#### **Support gained from the Sámi Parliament**

Within coastal areas of northern Norway, the Sámi Parliament has authoritative jurisdiction to shape policy associated with, for instance, coastal zoning processes<sup>43</sup>. Thus, the Sámi Parliament is entangled within the conflicts small-scale fishers face over the management of natural marine resources, over which, it could be suggested, the Sámi Parliament has responsibility to effectively manage and sustainably develop. With regards to support gained from the Sámi Parliament, the following findings outline informant experiences. Sigrid Isaksen, for instance, stated:

*The last time they wanted to put out a salmon farm on the north side of the island the Sameting (Sámi Parliament) stopped it. [...] I think it was 2002 or 2004 they started to want the place. [...] [And] for the past 4 or 5 years we've seen this pressure again.*

Subsequently, the Sámi Parliament assisted in stopping the proposed farm over which Sigrid was discussing. An area in which they had been responsible for stopping development in the past. In relation to the recent decision, Roy Isaksen provided a detailed account of his experience seeking support from the Sámi Parliament. This related to the last time a fish farm was allocated by local government authorities, but which, because of the support through formal protest by the Parliament - assisted by knowledge generated from the mapping project led by Camilla Brattland that introduced me to Spildra - was denied at the regional level of

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<sup>43</sup> Additionally, both the Consultation Agreement and The Finnmark Act are examples of the Norwegian State implementing actions to meet its commitments to safeguard Sámi culture by giving the Sámi Parliament greater jurisdictional authority to influence process to directly concern Sámi residents. The Consultation Agreement was established to provide Sámi people with a platform for consultation in matters that affect their culture, while the Finnmark Act as an action initiated to provide for Sámi land rights (Pedersen, 2012).

government. Because of the depth of Roy's understanding of the potential of support available from the Sámi Parliament the following statement is provided at length. Roy stated:

*We do send quite a lot, that's because they have the authority from the government. Because they also have sensible policy. [...] They also have innsigelsesrett<sup>44</sup> they can put down, even if the local community, the fylke (Kvaenangen municipality), Troms Fylkesman (Troms County Governor) say that the fish farm can get licensed. Then they can go and say we don't like it because this is our local area and the people who are living there are living in our local area [...] have been doing so for thousands of years. [...] So, that's why we involve them quite a lot. Because we know they have much more force than we have and they have much more force than the Fylkesman (Governor) in Troms has, they can just say that we don't allow it and then it has to go all the way up to [...] the king. It's actually the king who can say that 'we don't want to hear about that, that we can take your words and hear that, we will just look over you'. But, they can't do that, they have signed an international agreement.*

*[The Sámi Parliament has not acted in that way it is thought,] because they don't want to put that problem in the first. Because they also want to have the democracy working. [...] [T]hey have put out there that they're against it, as a protest, because you have to, if you go rush too quick into it, then you haven't followed the democratic processes. That's why they're coming with a formal protest against it. They have also asked that they want to have a meeting and a talking with the Fylkesman in Tromsø because they want to give the license, before he's started to work on the case. Because they wanted him to say that he would not allow them to have the fish farm here. But of course, if he doesn't want to listen to the Sameting then they can say 'ok we put an innsigelsesrett'. He can't do anything about it. Then he has to go higher up. That is not enough to go up to the ministry, because the ministry isn't high enough, they are higher than the ministry. It's quite a heavy thing to do. [...] They are not normally higher, [but] because of that right they can put their foot down. And, then it's a totally different thing than just a protest. And you have to go to the government of Norway.*

*So, also they have lawyers up there who can take care of those things if it comes into justice, the same thing as the fishing association. We also have our own lawyer, if it goes into the court, we can use our own lawyers. We can take the local right to fishing against the local government, to take away that area, the fishing right. It could happen, but it is a difficult thing. Everything always ends up into politics. But, the Sámi parliament could just say that we use that innseglesrett and say that, then it's really hard for the government to overcome it. But then they can also say that 'we don't use it'. [...] And, they say that maybe we want to try and go to court, just to see if the court agreeing with us. But then they're also thinking that if the court agrees with us about this thing, the court can agree about several other things at the same time because it sets a precedence. So, they may say that 'we don't want to use our power to stop it, we will let it go to court', [...] then you have to take us, as the local people, to go to court against the government that's allowed the fish-farming industry to get our area. And, if*

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<sup>44</sup> Innsigelsesrett could be roughly defined in English as 'the right to voice your objections'.

*we are winning, and it goes all the way up to the high court, then it makes precedence for all of those cases in the fjord.*

*[...]That's a consideration. And, we know that the salmon industry is really anxious that could happen, to go that far, and also the local government. The government is also quite anxious that we [might] do that. Because [...] you have to start local and go all the way up to the high court. Because the government of Norway could say 'we've lost there but we will go to Strasbourg', and you go to Strasbourg. And, you can go to the United Nations, because you have the civil ILO conventions and everything. If that happens, it takes years and years before everything can settle down. So, everybody is very anxious about it. Because for every new place that salmon farms want to have this fish, everyone will be told that you can't until everything is settled. [...]My guess is that, when it starts to get really straightened up, you get into a meeting in where the salmon industry, the fishing association, the Sámi parliament and the government and try to see if we can figure it out together, how to get an agreement about it. I guess that's the first thing that can happen with it, but you never know.*

Roy's experience suggests factors contributing to the sustainable development of local livelihoods relate to power and control; about being able to control processes and outcomes. Roy is using here the language of rights when he is envisioning ways for the community to gain more control over resources; as such, he is appealing to the legitimacy of nation-state accepted rights and how businesses operate. Factors highlighted in this section connect to such things as indigenous rights, litigation and the potential of some form of co-management (maybe like co-management models suggested previously in this chapter) as opportunities to potentially provide solutions to some of the challenges locals face. These finding also implies the potential support both the Sámi Parliament and lawyers could provide in as assisting the creation of future opportunity that might support the sustainable development of small scale-fisher and Sámi livelihoods.

### **The role of lawyers and academics**

In addition to what has been said previously in this thesis about the role of lawyers to aid in supporting local livelihoods, Trond Isaksen offered an experience in which the support of a lawyer was engaged in relation to conflicts locals on Spildra face, stating:

*[T]he last time we had a lawyer he worked for free for us. And, that time we just had to bring him with us and the salmon farmers gave up. [...] We didn't actually have to do anything. [...] He got two stockfish (dried cod) for his work. [...] They were surveying and they rented a boat. All of us came together and the salmon farmer and us, the lawyer, and we went to the location they wanted to put up the salmon farm. But when we brought a lawyer, they gave up. [...] That was the one that established the salmon farm in this fjord, so that was local people, Jokelfjordlaks it was called then. Maybe*

*they found out they didn't want to make so much mess. [...] Mess in their community, because they lived here. They had to meet these people.*

Trond's experience highlights that engaging a lawyer was successful, albeit informally and in conflict between local people.

Additionally, it is suggested that academics have a role to play as supporters for local communities. For instance, not only as being able to dedicate time and skill to researching relevant topics and issues, but they have the potential to play crucial roles in proving legal arguments. Academics were critical in influencing the outcomes of the Svartskogen case (Bjerkli, 2005), acting as expert witnesses on the side of the local community in court (J. Ramstad, personal communication, April 28, 2017). It is, therefore, suggested that academics would play an important role in any future court cases involving local communities and the Crown.

Results in these sections show that the support of both the Sámi Parliament and lawyers have been used with success; formally, in the case of support from the Sámi Parliament, and informally, as is the case with support from a lawyer. Findings also highlight that support from these actors provided additional power and agency to local people in influencing transforming institutions and processes (see figure 1) based on their rights and claims; enabling communities to continue a path towards developing sustainable livelihood outcomes. However, results also indicate that in relation to marine resources, critical elements associated with sustainable livelihood security - such as secure ownership of resources - exist for local livelihoods.

Based on understanding gathered in this chapter, it is suggested that the Sámi Parliament, lawyers and academics are necessary actors to engage with - especially in finding solutions to the type of conflicts small-scale fishers face - in effectively achieving sustainable development goals for coastal livelihoods. A fact, it could be claimed, exists where ever you have conflicts around resources in northern Norway. Laws are a way the international society deals with conflicts like these and in global systems of law, it is a necessary procedure to engage with such actors. The case of Svartskogen in Troms County, is an example of a local community issue that began by plaintiffs ignoring ethnic factors, but by gradually being drawn into international awareness of minority rights - especially awareness of indigenous rights - international legal arguments resulted in the court ruling in favor of the local community (Bjerkli, 2005). Likewise, in a recent case involving a young Sámi reindeer herder who went to court because of claims

his indigenous rights - his right to Sámi culture and right to maintain a Sámi way of life - were being violated by government authorities. Two courts decided the reindeer herder did have valid claims for protection (NRK, 2017). However, the government appealed and now he is awaiting Supreme Court decision (NRK, 2017).

## **6.4 Chapter Summary**

The objective of this chapter was to explore goals and aspirations informants had about the future and then prescribe suggestions, based on these, as to possible opportunities that might assist in sustainably developing their livelihoods. In doing so, suggestions in this chapter have been made to continue the push for co-management of marine-based natural resources and rights-based approaches as potential pathways to meet local goals. Moreover, the suggestion has been made to increase engagement with the Sámi Parliament, lawyers and academics as actors that can provide essential help in trying to reach local goals and those around the sustainable development of small-scale fisher livelihood.

Results in this chapter show that local people want greater means to participate in controlling how they live their lives today and to be able to make good choices that will contribute to how future generations live their lives. In addition, because findings show that the complex problems facing the sustainable development of local livelihoods in the region; suggestions have been made that opportunities may involve the use of a global comparative perspective towards community-based natural resource management and international rights-based approaches in relation to local problems. Suggestions like these provide hope that goals – both local and international - for the sustainable development of small-scale fisher livelihood are possible. However, it is suggested that because of the innovative action required to reach these goals ‘outside-the-box thinking’ may be required, and for any opportunities to result local people need to be collaborating in finding solutions. This chapter has shown how concepts like co-management and indigenous rights can possibly help give local communities back more control over their livelihoods. With sustainability being a political instrument, one the Norwegian Nation-state is committed to constitutionally and internationally, the concept of ‘a sustainable livelihood’, could be considered as being embedded within the governments commitments to promote sustainable development for the benefit of all Norwegians - now and in the future.

The next chapter provides a closing to this thesis. In doing so, the main empirical findings and analytical insight gained during this research project are discussed, and suggestions made for

future research might continue to explore factors that contribute to the sustainable development of small-scale fisher and coastal Sámi livelihoods in northern Norway.

## 7 Conclusions

This final chapter summarizes the main lesson learned and suggestions made based on what has been identified during this project. By taking a multidisciplinary perspective, incorporating an indigenous research approach as outlined in section 2.1.2 and sustainability thinking introduced in chapter 3 - including the sustainable livelihood framework presented in section 3.3.2 - this thesis has sought to identify factors that contribute to the sustainable development of small-scale fishers and coastal Sámi in northern Norway. In doing so, a case study of contemporary livelihoods and challenges affecting them on Spildra has been conducted. While this research has been made within an entangled field involving complex problems, with no easy solution, the following sections illustrate the main findings and analytical insights gained during this study and, subsequently, prescribes suggestion as to where future research and academics might focus attention.

### 7.1 Findings from the Study

If sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 54), then what factors contribute to it in the case of northern Norwegian coastal small-scale fisher and Sámi livelihoods? Based on fieldwork conducted on Spildra, this section outlines the key findings in relation to this question. A community in which multi-sectorial household livelihoods continue to display relatively high levels of adaptability, self-sufficiency, self-reliance and resilience, while being characterized by degrees of dependency, complexity and unpredictability. However, it is also a community in which inhabitants regard their local and indigenous ways of life as under-threat because of developments within their territory.

#### **Historical Factors**

In chapter 4 background knowledge was explored to help identify historical factors that have contributed to livelihood sustainability in northern Norway. Findings highlight that multi-sectorial livelihoods - based on land and sea resources - have been central to sustainable livelihoods in the region for centuries (Brattland, 2012; Davis & Jentoft, 2005; Bjorklund, 1991; Hansen, 2006). Also illustrated is the fact that Crown authorities have, at the bequeath of northern communities, implemented treaties and policies that have aimed to sustain indigenous and non-indigenous marine-based livelihoods alike (Pedersen, 2012; Hersoug, 2005). However,

also highlighted are challenging factors including government discrimination post WWII; unsustainable large-scale industry causing user conflicts; state-centered resource management; and Norwegianization policy (Bjorklund, 1991; Brattland, 2012; Hersoug, 2005; Nilsen, 2005; Davis & Jentoft, 2005). Findings suggest that these factors have contributed to small-scale fisher numbers in northern Norway being in modern times a fraction of what they were in the 1950s (Pedersen, 2012; Hersoug, 2005). Consequently, some coastal communities in northern Norway have become severely threatened with, paradoxically, local people having lost control over many factors that contribute to their sustainable development.

### **The Aquaculture Industry**

In section 5.2 aquaculture was the fjord user with most factors affecting the sustainable development of livelihoods on Spildra according to informants. Challenges identified included local anxiety over trending growth of the fish-farming industry and negative factors associated with the user's effects on the natural resources small-scale fishers gain livelihood from; including the environmental services and stocks required to derive livelihood from. Factors include limited access to safe work places and fish stocks; biodiversity loss; pollution; disease; maladaptation; and social challenges, including failure between the categorically different resource users to reach agreement and lobbying of aquaculture users within the local area. Because of these factors, it is suggested that dialogue and conflict resolution with a focus on sustainable development and institutional co-management could make a huge difference. With aquaculture not going away in the foreseeable future, resolutions need to be found. Resolutions involving all stake holders within the community, including the natural world which also holds stake.

It could be suggested that the current aquaculture conflict is reminiscent of past large-scale industrial developments effects on local livelihoods and current discrimination like that of government authorities in the past towards small-scale fishers. Findings also show that local fisher and community associations, the Sámi Parliament, lawyers and academics have also been supportive in assisting the sustainable development of livelihoods of small-scale fishers in their conflict with aquaculture as a fjord user.

### **Infrastructure**

In section 5.2.2 findings show that changes to local infrastructure was challenging local livelihood development. This included service cuts to Spildra like snow removal services, public transport to the island and pressure on the local community to construct a new waste



treatment plant; factors that were affecting the economic outcomes of local livelihoods. Also shown are tensions around the capabilities of small-scale fishers to extensify where they fish, due to vessels used being incapable to fish further afield or household dependency limiting options to travel. Additionally, tensions include worries over the dependency on the government as the largest employer in the local area.

### **Political Issues**

In sections 5.2.1 and 5.2.2 findings show factors influencing democratic processes related to decision-making and users of the fjord as contributing to the sustainable development of local livelihoods. The issue of mutual benefit sharing was raised, with claims made that other users - i.e. aquaculture - were receiving an unfair advantage because of the financial weight they brought into the local area. Additional factors include local concerns that their voices are not being listened to and that local control over livelihoods continues to be eroded because they do not have a legitimate place to collaborate in decision-making around resource use in the fjord, which is resulting in alienation, suspicion and mistrust. Co-management, as suggested in section 6.2.1, is one possible institutional option that might enable local people to have greater control in decision making and having their voices heard.

### **Facilitating New Fishers**

Findings in section 5.2.3 show factors associated with facilitating new fishers into the industry as contributing to the sustainable development of livelihoods. While informants considered it possible for new fishers to enter into the livelihood, some were anxious because of current development impeding the possibility, including increased conflict between users of the fjord and tension around essential infrastructure such as local ports to deliver fish to closing.

### **Tourist Fishing**

Tourist fishing was also highlighted in section 5.2.3 as a factor contributing to the sustainable development of local livelihoods. While acknowledging the benefits of diversification for some small-scale fishers into the tourism industry, some informants in this study had concern around local people accessing traditional fish stocks because of under-regulated tourist fishers impacting local fishing grounds.

### **Climate Change**

In section 5.2.4 climate change is shown - through local knowledge - to be currently affecting local livelihoods and its effects on livelihoods are anticipated to increase. Factors include the fish drying season becoming increasingly unpredictable with warming temperatures affecting

the length of the season. Additionally, fish behavior is expected to change as warming sea temperatures are expected to influence migratory fish species a factors that contributes to discussion around the sustainable development of livelihoods in focus of this thesis.

### **Sustainability and Development**

If we consider what sustainable development means in the context of Spildra, it can be assumed that the appropriation of different resources (including natural assets) in order to achieve goals and aspirations to continue to live on Spildra and continue to access small-scale fisheries, combined with multi-sectoral occupations, sustainable livelihood outcomes need to be met now in order to potentially meet those of future generations. This includes locals having greater control over how livelihood assets are managed in relation to transforming structures and processes that include the government and other categorical resource users. Informants signaled that they were open to resource management innovations that included multi-sectoral involvement. This relates to data gathered on informant visions about the future.

Therefore, it is suggested in section 6.2.1 that community-based collaborative resource management (co-management) may provide opportunity for more effective management that includes local users as legitimate decision-makers. Experiments in co-management suggest decentralization of power from hieratical state-centered decision making processes back to more egalitarian community levels, in ways that seek to support building trust, honesty, respect, co-operation, democracy and equality. Co-management as conflict resolution is also suggested as a potential entry point into which experiments might be instigated with the help of effective ‘non-user’ facilitators. In this respect, because conflict is not conducive to sustainable development, co-management might entail providing an institutional forum in which challenges for all stakeholders can be addressed and through collaboration sustainable solutions developed through processes of non-violence that are in the best interests of everyone in the community long-term.

## **7.2 Analytical Insights**

### **Entanglements: Challenges and Obstacles**

Because the world is an entanglement of global systems (Freidman, 1996), many factors that contribute to the sustainable development of small scale fisher and coastal Sámi livelihoods are entangled within global systems. For instance, the tourism industry is an example of a global system. Additionally, aquaculture and small-scale fishers are entangled within global market

systems. Furthermore, the indigenous rights movement is also entangled within global systems, such as the United Nations (United Nations, 2008).

Technological advancement and modernization have also entangled coastal livelihoods around a double-edged sword. While advancing small-scale fisher livelihood through material advancement like satellite communication systems, developments associated with the quest of commercial resource extraction have negatively affected communities. This can be seen in tension created for different indigenous communities around the management of marine-resources as the combination of technological advancement and modernization has increased resource extraction enterprises into remote indigenous territories (Brundtland, 1987); for instance First Nations of Turtle Island Canada (Birkes, 2007); Māori fishers in Aotearoa New Zealand (Hersoug, 2005); Palawian Tangbanua of the Philippines (Capistrano, 2010); and Mapuche in Chile (Mapuche Nation, n.d.).

Entanglement in tension, around the effective management of other resources, is currently a crisis affecting other indigenous communities around the world too. Struggles over the right to preserve fresh water are currently hotly debated and local communities are actively resisting the privatization of this crucial resource. In Aotearoa, for instance, resistance to fresh water extraction from Poriti Springs (Radio New Zealand, 2015) and other issues that relate to Māori water rights - including ownership - are hot topics (The Economist, 2015). The same can be seen with indigenous American Sioux tribes protesting at Standing Rock in North Dakota about the Dakota Access oil pipeline threatening, amongst other things, fresh water access for local communities; a conflict which has made headlines around the world (#NODAPL PROTESTS, n.d.; Erikson, 2017). It can be suggested that from an indigenous-rights standpoint these conflicts are similar to those which the Spildra community is facing and that lessons can be learnt from comparative perspectives.

While some aspects of global systems can be seen as challenges and obstacles, others provide opportunity. Two systems highlighted, based on analytical insight into this thesis, are the legal system - through the language of rights - and the media's role in relating conflict to the public, have potential to support the sustainable development livelihoods in northern Norway.

### **The Language of Rights**

The legal system is an example of a system which provides opportunity in a sense, because it provides a neutral venue in which everyone has a right to be heard and courts are supposed to

present the right decisions based on law. This is why courts are so important and why existing laws are so hard to change and new ones so hard to establish. Indigenous rights laws, for instance, have been long debated as controversial, at least to many citizens of nation-states, yet the fact is they are law. Subjects are produced within a discourse and within grand strategies - the rituals or the microphysics of power created by individuals - an absolute truth is that knowledge which operates within these regimes of truth because there is no simple projection of centralized power (Hall, 1997). In regards to law, it is suggested that obligation is on individuals and organizations to challenge power when necessary.

It is proven that when human rights are violated the international community may invoke sanctions and/or boycotts to maintain their moral obligations to stop violations from continuing. As seen for example in acts which ended apartheid in South Africa. The UN is a high-level political forum where this happens for instance. The legal system regulates access and opportunities for local people, and, in particular, for indigenous coastal Sámi. Several suggestions have been made in section 6.2.2 that address questions of rights and autonomy.

Norwegian Constitutional Rights relating to Article 108 and Article 112 have been suggested in section 6.3.1 as providing guarantees for the sustainable development of the material basis of coastal Sámi livelihoods and the natural resources on which small-scale fishers depend. Additionally, in section 6.3.2 The UNCCPR and ILO 169 have been suggested international human rights treaties that can be claimed to provide similar protection for guaranteeing sustainable development of indigenous livelihoods in northern Norway. Based on these suggestions, the concept of positive discrimination in favor of community-based rights is suggested in section 6.3.3; a suggestion that calls for greater involvement of actors such as the Sámi Parliament, lawyers and researchers in support of local resistance on section 6.3.4.

It is suggested that indigenous-rights could be a 'trump card' to play for mitigation and adaptation threat factors that inhibited the sustainable development of communities within which indigenous livelihoods are found. A suggested legal and moral option including a goal of sustainable development in collaboration with community. Furthermore, it is suggested that positive discrimination based on indigenous-rights that benefits everyone in the community regardless of ethnic background, as suggested in section 6.3.3, holds power that could be a contributing factor to the sustainable development of coastal communities and livelihoods. Again, while there is no clear distinction between indigenous and non-indigenous ethnic groups

in northern Norway, indigenous rights have potential to benefit everyone in the region as well as tie into wider debates around ‘a good life’ and sustainability, for instance.

### **The Role of Media**

The media is another global system. It is suggested that the media has several roles to play as a factor contributing to sustainable development. As a system, both electronic and print media is influential in modifying cultural words and spaces, shaping and reshaping society, and transforming the space between viewers and events (Appadurai, 1998). For instance, on one hand it assists in setting political agendas, while on another it is responsible for informing the general public about and bringing attention to targeted injustices, thus, insisting on a focus of the responsibilities of politicians. This includes influence on the Sámi Parliament. For instance, local reporting of court decisions relating to human rights (NRK, 2017; NRK, 2017) or international coverage of other indigenous issues (Radio New Zealand, 2015; The Economist, 2015). In this respect, it is suggested that politicians become entangled in the work and ways of local and mainstream media, because government representatives cannot continue to ignore an issue debated in the media, especially when it becomes entangled within mainstream media (J. Ramstad, personal communication, April 05, 2017).

## **7.3 Future Research and the Role of Academics**

Based on findings in this study numerous suggestions for future research and the role academics play can be made. It is suggested that the indigenous coastal Sámi knowledge system Mea requires further exploration. For instance, focus group sessions might be used to gather existing indigenous knowledge that remains within communities or, perhaps, consider people’s perceptions of the future of Mea. In addition, it is suggested that a closer look is taken into the relationship between different agents - including government representatives, aquaculture and tourism operators - actively involved in the use of local resources and the fjords. Furthermore, it is suggested that more explicit applied research projects need instigating that explore prospects of co-management. This might be done, for instance, by holding focus groups to explore local stakeholder responses to the potential of new experiments. A final suggestion is that tourism, especially ecological-tourism, be explored as a legitimate sustainable livelihood approach for diversifying livelihood strategies within coastal communities, perhaps a start could be surveying tourists to gauge how important the environmental health of the region was to their decisions to visit.

Applied research is a positioning in academia which looks to explicitly help in problem-solving and at the potential of research to empower participants, and one which I have attempted to have taken in this thesis. This positioning has been inspired by others in the field of indigenous studies who assume it a moral premise that research should acknowledge injustices and in doing so provide 'voice' to marginalized communities and their systems of knowledge within research (Smith, 2012; Deloria Jr., Spirit and Reason, 1999; Wilson, 2009). Consequently, it is a positioning that suggests academics are responsible for providing knowledge and that research that can be regarded as a means of resistance against illegal, unlawful and unjust misuse of resources, and disruptions of cultures and ways of life. Resistance in this study has explored factors that contribute to the sustainable development of small-scale fisher and coastal Sámi livelihoods in northern Norway, in a way that - while not being 'anti-development' - argues for development. Development in the interest of all coastal people - today and tomorrow - not just those with 'the most' power. It should also not be assumed that communities like Spildra are powerless, on the contrary. As shown in this thesis, local people have a lot of power and are active in challenging institutions and processes to be able to have more control over shaping their future.

### **Final Remarks**

As a student of indigenous studies, this thesis has allowed me to explore local issues around indigeneity and sustainable development here in Troms within Sápmi. A territory that a few years ago I never had imagined visiting, let alone move to and do research in. Incorporated in this thesis are lessons I have learned through doing research here in the Arctic and while this novel exploration provides insight into the issues surrounding sustainable development, my relative inexperience in undertaking such an ambitious research project with limited experience and resources perhaps shines through with gaps remaining and questions left unanswered. Equally problematic when it comes to doing research with people in such a limited time frame has been a challenge.

Still, I have discovered that problems existing here generate from similar sources to those at home in Aotearoa New Zealand, including assimilation having affected Māori in many similar ways to Sámi. For instance, revitalization experiences and challenges are mirrored here in Sápmi. Also, interesting has been similar issues that we at home have with water sustainability, or more precisely water unsustainability created by large-scale farming. Here it is caused by farmed fish affecting salt-water, while in Aotearoa New Zealand the major culprit are farmed

cows effecting fresh-water resources. I have also been fascinated in why no ethnic data is collected in Norway, a stark contrast to my experiences in Aotearoa where in the national census people are free to choose ethnic affiliation.

In ending this thesis, as a researcher, I endeavor to remain committed to helping foster sustainable outcomes for Spildra and other communities - coastal Sámi and non-coastal Sámi - like them around the world. Moreover, from lessons learned in this thesis I believe that to effectively safeguard marine resources long-term in northern Norway, collaboration with local users - small-scale fishers, coastal Sámi and aquaculture included - whose livelihoods depend on the effective resource management within the sea is vital.

# Figures

Figure 1. The Sustainable Livelihood Framework (UK Department for International Development, 1999, p. 1)

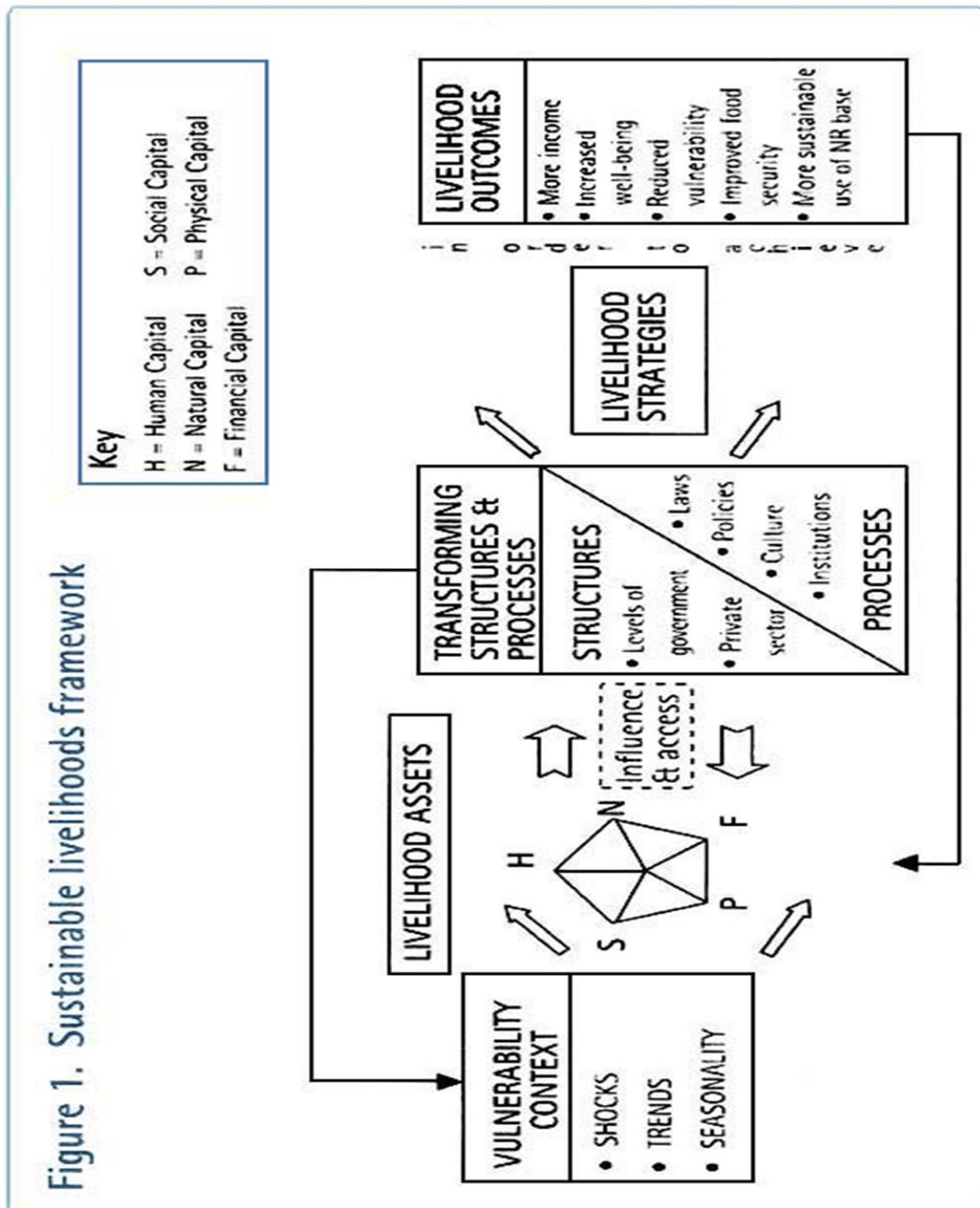
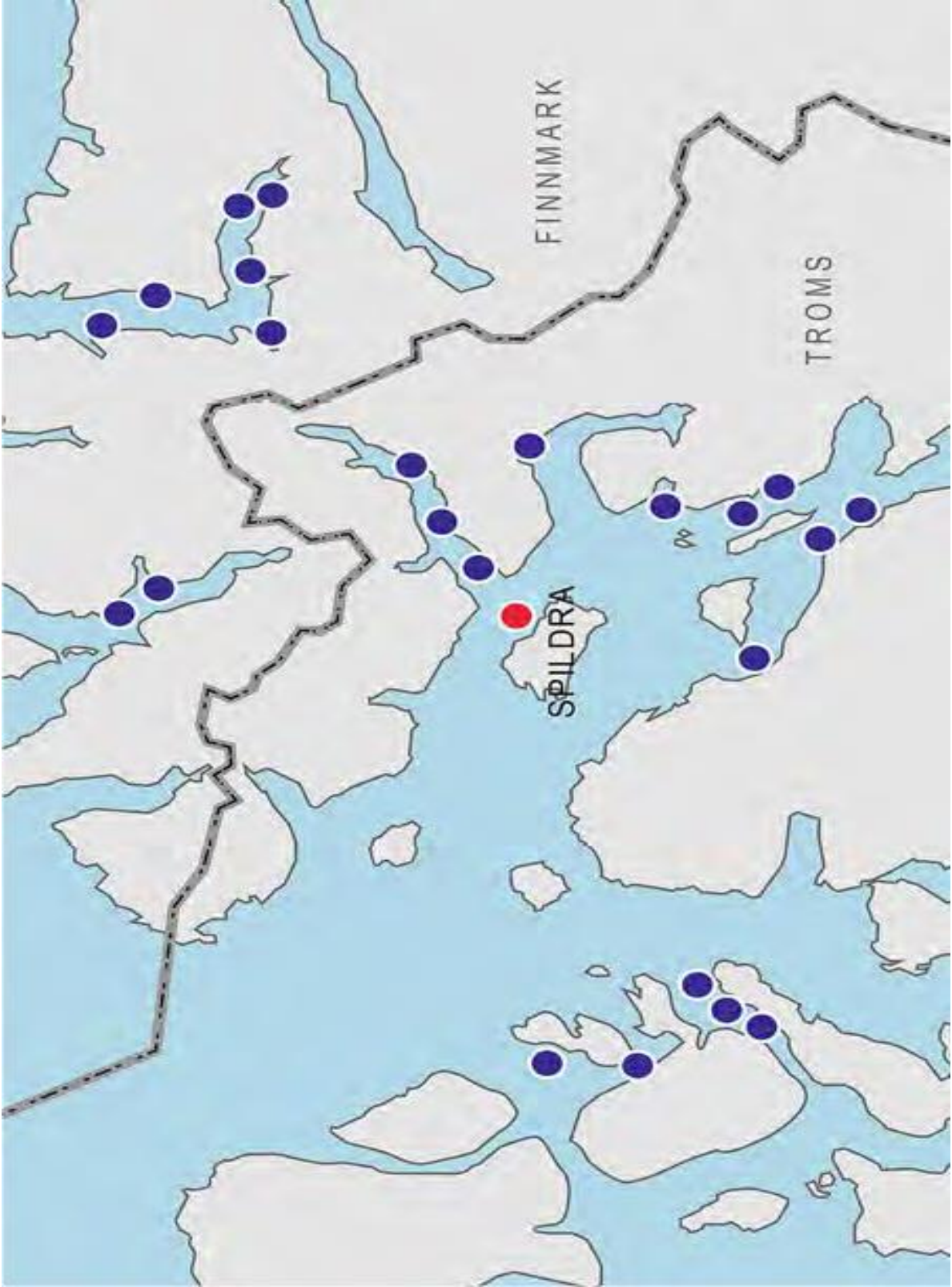




Figure 2. Map locating Spildra in relation to existing aquaculture farms (in blue) and a proposed farm (in red) (Brattland & Eythorsson, 2016, p. 31).



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