

Fishing livelihoods and culturally-appropriate fisheries management in North Iceland Catherine P Chambers



Abstract

My research challenges the dominant "tragedy of the commons" framing of fisheries by asking: can a truly "sustainable" fishery



management scheme be good for fish and bad for fishing livelihoods? I quantitatively and qualitatively explore the relationship between different types of fisheries management, motivations for participation in fisheries, and the importance of small-scale fisheries in North Iceland. Here, I present preliminary data focused on exploring motivations in fisheries to better understand the ways varying

management schemes affect people's abilities to access resources and engage in culturally and historically important livelihoods.











Icelandic currency denoting marine life.

Background and significance

- Iceland is known as one of the most sustainably-managed fisheries in the world because of fisheries privatization.
- Fisheries privatization reduces the amount of people fishing and is justified by economic and environmental management end goals. However, it tends to decrease the amount of people employed by fisheries in both the catching and processing sectors



Single boat out in Húnaflói Bay.

and can have serious impacts on rural coastal communities (Pálsson & Helgason 1995, Eythórsson 2000, Skaptadóttir 2000, Kárlsdóttir 2008, Olson 2011).

Fisheries management schemes assuming one culturallyspecific reasoning over another can often lead to tension between user-groups and ultimate failure. For example, do fishers fish only for maximum economic gain that will lead to a tragedy of the commons, or do some fishers fish for noneconomic motivations and work together to avoid resource depletion? At a time when privatization of fisheries is increasing worldwide, it is important to understand the impacts that management schemes have on cultural dimensions of fisheries in order to design management scenarios that are effective from economic, environmental, and social standpoints.



Key informant and his jig *boat* F/V Alda.



Painting of an informant's favorite boat proudly hung in his living room.

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Research objectives

- 1. To document and describe the demographics and history of the participants in the four main types of fisheries management systems (big boat quotas, small boat quotas, open summer jig season, and licensed lumpfish season) in North Iceland.
- of conservation of natural marine resources, access to fisheries, property relationships, and non-economic motivations for participating in fisheries.
- 3. To systematically determine how connections to fishing, levels of participation, socio-cultural dependence on fisheries, and motivations and values for fishing vary by participation in the four different fisheries management systems.
- 4. To determine how artisanal and entry-level fishing is encouraged or inhibited by certain management regimes.

Theoretical framework and methods

This study is based on theories from **political ecology**, which is an interdisciplinary field with influence from geography and anthropology that studies the political and economic forces that are linked to environmental issues. In this exploratory phase of my research, I use participant observation and open-ended interviews with key informants (n=20) in the four main fishery management systems to elicit important themes that I will investigate in-depth in later phases.



Volunteering in a processing plant to meet informants.



Study communities in Húnaflói Bay and Skagafjörður Fjord. Map from extremeiceland.is

Interview	themes, guiding questio
Conservation	How can fishermen best ensure fish for the factors conservation more than others? Small boat quota fishermen feel there is "more system and little concern for conservation
Access	Who should have the right to access fisheries should fisheries best be managed? You have to be "lucky enough" to have a fam Small boat quota fishermen report feeli management and that "operations of fishermen feel more directly engaged in
Fishing culture	What purpose do fisheries serve in a commu- "The small vessels and different types of sea those who want to fish because they gr quotas" means that many small-scale f strained relationships between small-be shame in working just as a crew and no
Property	Can fisheries resources be owned? How do a resources and property relationships? Lumpfish fishermen tend to report a collective difficult to disentangle from dominant d

2. To document narratives and discourses about fisheries management in Iceland and four themes



Lumpfish fishing.

ons, preliminary findings

future? Do some types of fishermen worry about

ore fishing of less valuable fish" in the large quota lon.

s, who should have the right to decide? How

nily member in fishing, and this is the only way in. ng disconnected from involvement in fisheries ishing have come far from the sea," while lumpfish n the management process.

unity? Why do individuals engage in fishing?

asons are virtually eliminated," which excludes rew up fishing. The "tremendous reduction in fishermen have to lease quotas, which leads to oat fishermen and companies. Additionally, there is ot being able to own boats.

fishery resources differ from other types of

e ownership, but concepts of property are still discourses of the quota system.

Case study: Estimating historical lumpfish population abundance



Female lumpfish.

Discussion

- greedy individuals?

Next steps

Semi-structured interviews: I will collect more qualitative data by developing a semi-structured interview protocol for a larger sample of informants. I will then analyze field note and interview data with a qualitative data coding software.







Including the natural sciences

During the interview process, I will also collect old fishing logbooks from the 1970's, before the lumpfish roe fishery developed. I will work with the Icelandic Marine Research Institute to estimate catch per unit effort [(hundreds of fish)/day(size of vessel)]

to then estimate historical biomass of the lumpfish population. This estimation will aid fisheries managers in understanding the lumpfish population structure prior to commercial exploitation.

It is very hard for those without quota to maintain a fishing lifestyle. If this is the case, do non-quota management systems really encourage fully-engaged fishing lifestyles?

A major thread running through all interviews is the "purpose" of fisheries: Are fisheries for the nation of Iceland as a whole (export value) or for local communities (household income)? Informants suggest that this is a major tension and difference between the four different management arrangements.

The concept of greed was very prominent in interviews; those who engage in one type of fishery may be more greedy than others. This leads to the further need to explore both

motivations and restrictions for engagement in certain kinds of fisheries. Will entry-level and artisanal fisheries be over-run by

The lumpfish case study will combine natural and social sciences and offers exciting prospects for understanding multifaceted goals of fisheries management.

Learning to skin a seal: Participation in the everyday realities of those engaged in marine livelihoods helps me to build research relationships with informants and obtain first-hand knowledge that would otherwise not come out in sitdown interviews or surveys.

Survey deployment: I will test relationships between dependent variables relating to the four main themes and independent variables such as percent household income from marine-based livelihoods, age, community of residence, number of years in a community, parents' main occupation, income, gender, union membership, and political orientation.